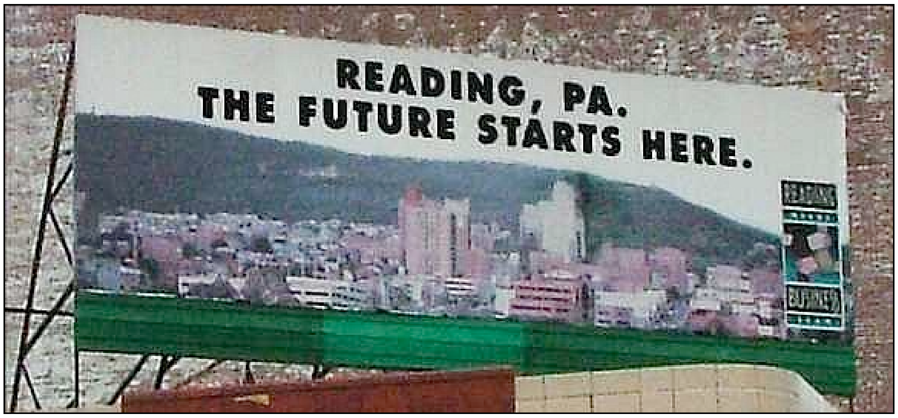

Reinventing Reading:

A Comprehensive Vision and Framework for Revitalization

To my parents, whose love, support, guidance, and faith have carried me along the path of life and continue to be sources of strength in all I do.

Thank you.

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About the Author

Eron Lloyd was born and raised in Reading, Pennsylvania. He is a student of Political Economy, recent recipient of the Shirk leadership scholarship from Albright College, an active member of the American Planning Association and American Political Science Association, and has been researching, educating about, and participating in community revitalization efforts for over 10 years.

After living in another part of Pennsylvania and out-of-state for several years, he's decided to return to his home town in hopes of contributing to the community that helped shape him. He welcomes all feedback and further discussion of this document, and can be reached at the e-mail address **reinventingreading@gmail.com**.

Acknowledgments

Many thanks to the following people and organizations who have directly assisted in the research and development of this paper:

Sarah Jacobson and **Kevin Murphy**, for proofreading and invaluable feedback; any remaining mistakes are my own

Eric Prindle of the *Center for Voting and Democracy*, for help with legal and strategic matters related to voting and election reforms

Joshua Vincent of the *Center for the Study of Economics*, for help with matters of tax reform and economic development

Executive Summary

Like many communities in Pennsylvania, the city of Reading is struggling with a significant number of serious challenges from both within its borders and the world surrounding it. To successfully address these challenges, this report seeks to provide both a better understanding of the issues and an integrated set of strategies to help solve them.

This comprehensive vision and framework for revitalization is based on the beliefs that effective approaches to our problems exist, that change tends to happen best on the local level, and that positive examples of change are contagious. With those ideas in mind, the vision and framework developed offer practical and proven solutions for the three main pillars of a healthy society. Here is a brief summary of each subject and the included solutions:

I. ***Democratic governance*, used to expand and enhance social equity among our diverse citizenry.**

   A. Establish a Community Bill of Rights and Responsibilities to communicate our shared values and expectations and revive a sense of civic virtue and duty.

   B. Redesign our electoral system using superdistricts, ranked preference voting, and lowered voting age to improve political participation and representation.

   C. Expand the number of public commissions to assist in the development of effective public policy.

   D. Formalize the city's neighborhood councils into real governing bodies capable of addressing important neighborhood issues effectively.

   E. Encourage greater intergovernmental cooperation in an effort to tackle common issues and collaborate on innovative approaches, fostering both local and international partnerships.

   F. Lobby on the state, national, and international levels to protect local control and prevent policies harmful to efforts back home and push for county home rule reorganization.

II. ***Economic self-reliance*, used to strengthen and protect our local economy against threats of instability.**

   A. Move away from tax policies that unwittingly punish economic development and reward blight, sprawl, pollution, and other undesirable activities through the use of land and resource taxation/user fees.

   B. Focus on supporting and rewarding local businesses instead of attempting to attract outside firms with publicly-funded incentive packages.

C. Create new business opportunities and insulate our economy from global instability by replacing critical dependencies on imported goods and services with local production.

D. Shift purchasing decisions to support local businesses, facilitate import replacement, and keep money circulating in the local economy.

E. Rebuild our labor force and eliminate poverty with improved wage, health care, and educational opportunities.

F. Heavily reinvest in our community using community development financial institutions, targeted investments, new market tax credits, and local investment circles.

III. *Environmental sustainability*, used to recognize and redesign our connection to the natural world.

A. Achieve energy independence through energy conservation, renewable energy investments, biofuel industries, and local combined heat and power plants.

B. Protect our water supply through water conservation, distributed water treatment methods, rainwater catchment reserves, and a constructed wetland treatment plant.

C. Produce food using local farms, organic agricultural methods, local food markets and stores, and local food processing and preparation businesses.

D. Maintain healthy neighborhoods through community beautification, historical preservation, code enforcement, land value taxation, community land trust, green building, and new urbanism.

E. Solve transportation challenges through traffic congestion charges, market-rate paid parking, emissions fees, mass transit funding, car sharing, and community mobility.

F. Address solid waste issues through municipal waste collection, recycling and composting services, and a zero-waste agenda.

With this vision and framework in hand, Reading has the potential to become the best place to live, work, and visit in the state and can become one of the most innovative and cutting-edge cities in the nation. Because knowledge without action means little, it is the goal of this paper not to simply inform but to inspire the reader to action. With a strong commitment from the community, the vision and framework provided could enable the city to dramatically reverse the causes of its worse problems by the end of the current decade and help it chart a course to effectively navigate the upcoming challenges of the 21^{st} century.

Introduction

"The significant problems we face cannot be solved at the same level of thinking we were at when we created them."

–Albert Einstein

"As our case is new, so must we think anew, and act anew."

–Abraham Lincoln

"It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without the risk to the rest of the country. . .Denial of the right to experiment may be fraught with serious consequences to the Nation."

–Justice Louis Brandeis

There are two ways to view the city of Reading. The most popular view is one that sees the city as full of problems. The other view is to see the city as full of potential. This paper is based upon a deep belief that not only can Reading soon be a great city again—better than ever before, in fact—but that there is a clear way to make this happen. From this belief flows a new vision, built upon a comprehensive framework for change. The vision and resulting framework offered are guided by three simple but important principles.

First, an effective approach to every problem we face already exists. What this paper has essentially done has been to explore the wide range of good ideas, select ones that address our challenges, connect them together, and present them as a unified and coherent solution. While some of these proposals may seem bold (or perhaps even radical), they are being implemented elsewhere in practical and successful ways. By being presented together, it is hoped that the reader will discover the important relationships between these proposals and recognize their significance in our efforts to change. At the same time, even such good ideas can be made greater, so further input and improvements to the framework will be necessary and welcomed.

Second, change tends to happen best on the local level. Unfortunately, many changes are often imposed upon a community from the outside without the input, understanding, or support of the people affected, only to fail shortly thereafter. To be successful, we need to take a grassroots approach, work from the inside out, and allow the people of the community to adopt this vision and change agenda as their own. Additionally, many of the ideas included in this framework challenge our basic assumptions and require an entirely new way of thinking. Because of this, it is difficult if not impossible to begin implementing them on the state or national level. Instead, they should be adapted and "test driven" for their ability to meet local needs, with every community becoming a creative lab for new ideas and approaches.

Third, positive examples are contagious. Solutions that become successful in Reading will spark interest and emulation from surrounding communities. Although every idea discussed in the paper has been successfully implemented elsewhere, few have been attempted here in PA. This gives Reading a unique opportunity to become the most innovative and forward-thinking city in the state and a successful model to follow. In a very real way—just as Gandhi proposed—the city could truly become the "change it wants to see in the world."

With these principles, then, as the driving force, the proposed framework has been built upon the three main pillars of a diverse, successful, and healthy society: *democratic governance*, used to expand and enhance social equity; *economic self-reliance*, which will strengthen and protect our local economy; and *environmental sustainability*, which is essential to recognize and redesign our connection to the natural world.

Each pillar serves as a major part of the paper, and is further divided into a collection of topic sections related to each general subject. Within each section is a number of specific recommendations highlighted in bold, which are also listed in an index. The entire document offers almost three hundred exciting ideas related to these recommendations. More information on each topic area can be found in the appendix, which is organized in the same order as the body of the paper.

The goal of this paper is not to simply inform but to inspire the reader to action. By presenting a collection of positive possibilities, it is hoped that a new conversation can begin that charts our course towards a promising future. With your help, Reading can become the starting point for a better world.

Part I: Democratic Governance

"Many forms of Government have been tried, and will be tried in this world of sin and woe. No one pretends that democracy is perfect or all-wise. Indeed, it has been said that democracy is the worst form of Government except all those others that have been tried from time to time."

–Winston Churchill

"All the ills of democracy can be cured by more democracy."

–Alfred E. Smith

"The citizen can bring our political and governmental institutions back to life, make them responsive and accountable, and keep them honest. No one else can."

–John Gardner

Our road to change is going to require a long series of discussions. How will we best strengthen our economy? How will we best protect our environment? Out of these conversations will emerge literally hundreds of issues, ideas, and decisions that will need to be addressed. How we get there is just as important as where we're going. We must therefore ensure our efforts are open and deliberative and that our decisions have the support of as many people as possible. New leaders will emerge, new voices will want to be heard, and any resulting conflict will need to be handled fairly and effectively. This is what's commonly known as a democratic process.

Overseeing this process and managing the resulting decisions is what is known as the governing body. A problem exists though, in that while most people understand and value the basic principles of democracy, few truly recognize that governance is done through us all, not just the officials in City Hall. We need to empower and involve ourselves in every way possible, reorganizing our community democratically on every level of the change process.

To do this, we must start by redesigning our democratic institutions and practices—the foundations of civil society. It is a task full of challenges: citizens have little faith in government, elections suffer terribly low levels of participation, and laws and policies seem to reflect the needs of special interests, not the will of the people. Many outdated ideas about democracy and structures of governance still dominate our community, and new concepts and models must be introduced.

Community Bill of Rights and Responsibilities

Reading's charter is the fundamental document holding the city together, laying out the specific details of the form and function of our local government. What it fails to communicate however, is the common values and expectations of the community and the quality of life goals the city should constantly strive to provide for its members. In order to change the future of our community, we first need to develop a common vision and language of what that future actually looks like. **A refreshing way to begin this process is with a publicly developed declaration of our shared vision, captured in a community Bill of Rights and Responsibilities.** This document will then serve as the groundwork for our change agenda.

This is a special opportunity for the community to come together as a whole and freely discuss and debate the kind of city it wants to become, including what goals and expectations of the government, citizens, businesses, schools, and other parts of the community are necessary to be successful. Be sure to include every voice that wishes to be heard, as only then will the outcome be effective. And when it's finished, put it in the hands of every person in the city. Let them know a new future is beginning and that they need to be a part of the process.

So what rights should be central to every citizen of our community? The goal of this exercise is to think broadly about what a community is and the benefits of being part of one. Do not become stuck in the present or even the past. Instead, envision a positive, perhaps even ideal future where democratic governance, economic self-reliance, and environmental sustainability can be realized. What types of rights would you wish for? The right to a safe neighborhood to live in? The right to affordable housing and transportation? The right to clean air, soil, and water? The right to participate in and be represented to the fullest extent in governance?

You may ask why this would be necessary, what with the many rights detailed in both the state and national constitutions. Besides clarification or further emphasis, there are many additional rights granted in the state constitution that were not enumerated in the national one, such as the right to vote.[1] It is our duty to build upon the foundation of rights provided by these documents and further define what it means to be a citizen of this special community. Having a clear enumeration of rights will guide our policies by keeping quality of life a top priority.

Along with rights come the importance of responsibilities. As part of the community, what things should be expected of every member? This should also be a significant topic of discussion. Strong communities don't just happen. Cops alone cannot stop crime; schools alone cannot educate our children; businesses alone cannot maintain a good economy; and government alone cannot solve our problems through laws and taxes.

To make our community work, we must recognize our fundamental roles as neighbors, parents, leaders, taxpayers, workers, students, voters, consumers, and business owners. What are our responsibilities to ourselves, our families, our community, and our environment? A duty to practice tolerance and respect for one another? A duty to keep our community clean and safe? A duty to actively participate in governance? A duty to support the local economy? A duty to promote racial, cultural, and religious diversity? A duty to empower our youth? A duty to plan our future with our children in mind? A duty to hold our elected leaders accountable? These responsibilities will help to determine the expectations of every community member. Those not keeping their responsibilities will risk strong pressure from the community.

While community pressure and legal penalties are important tools to enforce these responsibilities we must also encourage and reward positive behavior, identifying new role models for our community. Unfortunately, many people have forgotten what it's like to be part of a healthy community and have lost the tradition of civic engagement. Reviving this personal quality is critical to our renewal efforts, and is especially important to instill in our youth at every opportunity.

Although drafting such a bill of rights and responsibilities is important, it is only a first step. This exercise will not by itself create the vision it documents, nor will it ensure a Utopian future for

1 The right to vote is still not expressed in the U.S. Constitution, jeopardizing any votes for federal office.

the community. These ideals will only be met through commitment and hard work of the community as a whole, and the additional focus on economic self-reliance and environmental sustainability will be critical to this effort.

Political Participation and Representation

It's difficult to deny that our democracy is in serious decline, as the symptoms keep showing up everywhere. Voter registration and participation are abysmal, while citizen participation at public meetings is even worse. Many people have little faith in the elected officials, and the policies and priorities produced are often out of step with the problems faced. Elections are becoming less competitive, and our policymaking bodies poorly represent the growing social, economic, and political diversity of the community.

At the same time, many of the changes recommended in this document require serious shifts in municipal policy. Because of this, it is critical that we maintain a dedicated, accountable, and representative group of policymakers to debate, enact, and extend these reforms. In an era where few people have faith in our politicians and their policies, we must find a way to renew the belief in democracy and government. Addressing these challenges requires three important steps.

First, we should get rid of the single-member council districts and merge the city into what's called a single "superdistrict." A superdistrict works almost exactly like an at-large election, which is used to elect school board directors. Instead of only being able to vote for one candidate, you will help elect candidates for every seat available. In fact, it would be accurate to define the "district" in the school board's jurisdiction as being a superdistrict already.

The current form of single-member districts makes little sense for several reasons. A majority of the many important issues facing the city matter to every resident in every district. Who isn't concerned about crime, housing, taxes, municipal services, etc.? Viewing the city as a whole will help to keep the council focused on consensus-driven policy that will affect everyone, instead of pitting districts against each other in common "not in my backyard" disputes. This is not to suggest that localized, neighborhood-level issues are unimportant, just that there are more effective ways of addressing them.

Additionally, one person cannot accurately represent all of the constituents in her or his district, especially those who didn't vote the representative in. This often happens when like-minded people are spread out over all of the districts, diluting the effect of their votes that would otherwise ensure them a proper proportion of seats. Over time, they begin to realize that their votes never help elect anyone, and are essentially being wasted. Because their representative doesn't need their votes and generally disagrees with them on many issues, these constituents' concerns often go ignored. Realizing their vote and voice really don't matter, they often stop voting.

Besides continuing to lower voter turnout, this situation also tends to produce uncompetitive district seats as well, with other parties or political interests unable to successfully challenge the dominant party or incumbent. This is often why many elected officials are continually re-elected, even if most people in the district don't support them. When candidates have no competition, they tend to stop being responsive to their constituents, and the quality of the policies produced suffers.

A superdistrict will make it more likely for citizens of every political persuasion to find someone sympathetic to their concerns. Because seats cannot be monopolized by one party or individual in a district, they will become more competitive. These factors should dramatically improve both the quality and competitiveness of candidates and the participation of voters. Yet besides simply removing single-member districts, the key to producing these benefits is changing the way we cast and count votes. **To accomplish this, we must move from the current methods of plurality and at-large voting to ranked preference voting for all races.** Most people incorrectly believe that the current ways we vote are the only ways possible. In reality, the methods we use are actually the oldest and most inaccurate ways to vote that exist, variations of what is called the "winner-take-all" electoral method, which itself is at the core of some of the worst problems in American politics.

The general understanding of voting is that the candidate(s) with the highest number of votes will win. Since these candidates apparently had the support of most of the voters (what's called a majority of the vote), they deserve to become the leaders because they were given the legitimate mandate of the people. This is one of the fundamental principles of democracy. Under our current election system, most contests are between two considerably strong candidates. Even if there are other candidates running, they generally have very weak support among voters so a majority of the votes easily go to one of the two most popular candidates.

This isn't always the case, however. Suppose there are 3 popular, well-funded candidates running for office. A perfect example of this is during primary elections. If the criteria for victory is simply the highest number of votes, and the winning candidate only wins with 45% of the vote, that would mean that the 55% of losing voters would be beholden to the will of a minority of the population, creating an essentially undemocratic form of governance. While this situation may seem acceptable at first, what if the winning candidate's total was less—perhaps 40%, 35% or lower?

Because the idea of winner-take-all is so deeply ingrained in our collective psyche, this still might not seem disturbing. A paradox, however, appears when we look at the requirements necessary for these elected officials to operate and pass legislation into law. In order to even meet for official business, over half of city council must be present. To have any resolution pass into ordinance, at least a majority of council must vote to support it. To override a veto by the mayor, a supermajority vote by council is required. To amend the charter or recall an elected official, a majority vote from the public is also required. Why, then, should we require majority rule for our elected officials to do their job (or even be removed), but not to elect them in the first place?

Winner-take-all also produces the constant threat of spoilers and wasted votes. In a true democracy, a voter should be free to vote for the candidates she or he truly believes in with the possibility that they will have a fair chance of winning with the right amount of support. The unfortunate reality however, is that by voting their hopes many voters will waste their votes on candidates and parties that never seem to gain enough support (even if a good amount of people wished they could win) or in the most severe case end up causing the election of the candidates and parties they least supported.

This paradox creates many problems for a community seeking increased political participation and representation:

- The candidates and parties voters truly believe in are almost never voted for, out of fear of allowing the ones they dislike the most to win.
- The candidates that would otherwise run rarely ever do because they worry people won't risk votes by supporting them.
- The quality of candidates and campaigns continually deteriorates with reduced competition because the same people, parties, and promises can remain successful every election, even if they consistently fail to deliver.
- The winning representatives inaccurately represent the will and majority of the electorate, distorting the main principle of representative democracy.
- The resulting quality of policy developed by these elections remains ineffective, uncreative, and often out of step with the will of the people.
- Many voters become disenchanted and give up, not bothering to vote at all (often a clear majority of voters in municipal elections).

This destructive cycle is the main culprit behind declining participation in elections, both from potential candidates and voters. If the community wants a real democracy, good candidates, and strong voter turnout, this problem cannot be ignored. In very real ways, winner-take-all is making losers of us all.

The good news is that the solution to each of these problems can be found in ranked preference voting:

- Together with superdistricts, citizens won't be penalized by where they live and will always have an opportunity to run as or vote for candidates that represent their beliefs.
- With the threat of spoilers and wasted votes eliminated, candidates and parties with new ideas and issues will be able to run effectively with a fair chance of winning.
- Due to more competition, the quality of candidates and campaigns will improve and the debate over the future of the community will become more serious and creative.
- With more choices and the end of wasted votes, a surge in voter participation will occur.
- The candidates that win will truly deserve to, ensuring that the legitimate mandate of the voters is always democratically determined.
- The quality of policy and government services will increase, and the elected officials will remain responsive and accountable to the voters as well as more committed to their campaign promises. Those that aren't will have a greater risk of being recalled or defeated during an election.

Let's take a look at how it works. We need to first establish that there are two types of contests that we're concerned with: single-seat contests (such as for mayor) and multiseat contests (such as for city council), each requiring a slightly different approach. For single-seat contests, we'll detail a method called Instant Runoff Voting (IRV). For multiseat contests, we'll call it Single Transferable Vote (STV).[2] The key difference is the amount of seats (one or more) that need to be filled for each contest.

For the single-seat mayoral contest, it's quite simple to vote using IRV, which can be used as long as there are three or more candidates running. As the name implies, all the voter has to do is rank the candidates in the order of their preference: (1) for their first choice, (2) for their second choice, (3) for their third choice, and so on. The ballot to do this can take many forms, such as a traditional paper ballot where they would write in the numbers next to the names, an optical scan ballot (similar to test sheets or forms used in schools) where the numbers are darkened, or even a computer screen with corresponding buttons for each choice.

Once all the voters have completed their ballots, the rankings of each candidate are added up. If a candidate is the first choice for a majority of the voters, that candidate is declared the winner. If no candidate has a clear majority, then the candidate with the least amount of votes is dropped, and her or his votes are transferred to the second choices of their supporters. If a candidate then gets enough second choice votes added to their total to reach a majority, they are declared the winner. If not, the process continues, with the losing candidate of each round having their votes transferred to the remaining candidates of the next round. This process may continue until there are only two finalists left, where only one can possess a majority of the transferred votes.

Don't worry if this seems confusing at first. Each voter still only has one vote, but it is expressed in a way that allows it to continue to help determine the winner, even if the first few choices of the voter don't have enough support. It basically says, "I want my first choice candidate to win, but if she or he is defeated these are my next choices in order of my support for them." Using this ranking method, the candidate that wins should have the support of most of the voters, even if she or he isn't their first or second choice. This usually produces a result even better than just majority rule—a supermajority, in fact.

For contests involving multiple seats, such as city council or school board, things necessarily become a bit more complicated. While we still want the candidates with the most support to win, we also want our representative bodies to accurately reflect the often diverse composition of the electorate. Because of having multiple seats in such a situation, a simple majority threshold won't work. If there are five seats available, and 80% vote Democrat while 20% vote Republican, then the result should be four Democratic seats and one Republican seat. While it isn't always as simple as this, especially with more candidates/parties and different seats to votes ratios, this should be our ideal.

One of the greatest things about ranked preference voting is that the complexity is shielded from the voters. For a multiseat contest, voters would rank the candidates exactly the same way they would for a single-seat contest, in order of their preference. While it will take a good amount of initial re-training, once voters get the hang of ranking it can be consistently applied to all contests on the ballot, instead of using the currently confusing and mixed set of voting rules. Although voting for the two types of contests is exactly the same, what makes STV different from IRV comes when it is time to count the votes.

2 STV is also popularly known as Choice voting.

As mentioned before, a simple majority total cannot be used to determine the winners in multiseat contests. This would waste so many votes that all of the seats would not be filled. Instead of a majority, we determine what is called a threshold of victory. This threshold is the least number of votes needed by any candidate to be elected and win a seat. One standard formula for determining the threshold of victory is

(potential votes ÷ (number of seats + 1)) + 1 [3]

So for a city council or school board contest with 4 seats and 25,000 votes, the threshold would be 5,001. Since only 4 candidates could reach that total, we would declare the first four to do so the winners. Let's take a closer look at how this process occurs.

Like with IRV, the ballots are added up and the candidate with the most first choice votes wins, except we use the threshold, not a majority, as the determination. After that, the candidate with the least amount of support is dropped, and the transfer process begins. Consider, however, that the most popular candidate passes the threshold with many more votes than needed, perhaps 8,300 in the case of our example. What happens to the excess, or surplus votes? Along with picking losing candidates, it is possible to be penalized for picking the candidates with the most support. This creates wasted votes on both ends. Instead of being wasted however, just like losing votes they are simply transferred to the voters' second choices. Each round, a candidate is either elected or defeated, and their votes continue to match the remaining choices. In the end, the result will include the candidates favored most highly by all voters, based on the collective order of preference.

While there are several variations and finer details to these methods, you should at least now have a basic understanding of the fundamental concepts behind ranked preference voting and why it would bring true democracy to our electoral process. There is a science behind these concepts as part of the growing field of psephology, and newer and better ways of conducting elections are being developed and debated all the time. Even if IRV and STV are adopted, a close watch and an open mind should follow emerging advances in electoral systems.[4]

Such seemingly radical changes as ranked preference voting are often met with skepticism and resistance. Some people believe that American voters aren't capable of understanding or participating in such a thing. Others simply insist that things are just fine the way they've "always been" and should stay the same. Such naysayers should take a look both back at history and outside our borders.

As Douglas Amy explains in his book on proportional representation (PR), *New Choices, Real Voices*, the Proportional Representation League was formed in the U.S. in 1893 to promote the use of PR in its political bodies and decided the best way to push for the reform was on the city level. Along with the Electoral Reform Society in the U.K., they selected STV as the method of choice for PR.[5] Shortly afterward, the National Municipal League endorsed PR and made it part of its model city charter.

3 This is known as the Droop threshold. There are also several other formulas that can be used to determine the threshold, such as the Hare formula.

4 Some of the more advanced methods include Approval, Condorcet, and Range Voting. While these methods are technically much more effective than IRV, few yet have the necessary traction and public support. Hopefully this will change in the future and prompt further reforms.

STV was subsequently used in over 2 dozen cities in the early 20th century, such as New York, Cleveland, Boulder, and Toledo. This was during a period of deep political corruption in cities when other reforms such as scrapping at-large districts and converting to city-managers were also advocated. In Cincinnati, one of the most corrupt cities at the time, the PR reform prompted praise for the new level of integrity and professionalism in the local government. It was so effective in taking representation out of the hands of corrupt party machines like Tammany Hall in New York City (and even elected some of the first minorities to major positions) that the existing powers resorted to exploiting fears of race and communism to bring the reforms down. Another reason PR disappeared was because it was part of these larger packages of reforms that got entirely repealed for political reasons, not because they didn't work as planned.

While their time in the U.S. was short, many other established democracies such as Ireland, Germany, the Netherlands, and New Zealand benefit from the use of more modern electoral methods. The Canadian province of British Columbia is undertaking a major push for STV for its legislative bodies. London uses IRV to elect it's mayor, and the country of Britain—the modern birthplace of winner-take-all—itself is working to move away from it. In fact, both Afghanistan and Iraq now have more democratically representative forms of government than the U.S.[6] Can we still proclaim to be the World's most democratic society?

It is time for us Americans to boldly pursue a more democratic system for ourselves. Pennsylvania already has a little-known head-start that comes in the form of county commissioner races. The PA Constitution already requires the use of "limited voting," a form of semi-proportional representation, where you vote for less than the number of available seats for an office.[7] What this does is ensure that in each 3-seat county district, the second-largest party is always allocated some representation. Because of this, the precedent for fair and representative electoral methods has already been established with the support of the public and political parties. What we need to do now is improve upon it with ranked preference voting (which could easily apply to county commissioner races, too) and expand it to all races on the ballot.

While not a panacea, reforming our electoral methods will begin the process of reviving a truly dying democracy. Cambridge, MA is the only city left in the U.S. still using STV, but the movement to enact reform is spreading. San Francisco, CA and Burlington, VT recently adopted IRV, with many others on the way. IRV was recently used to select the host of the 2012 Olympics, and is also used to select winners for the Academy Awards. As in every other area of change, Reading should become a leader in the area of local election reform and make history by becoming the first city in PA to create a better democracy for its citizens through these reforms. Local private organizations and public institutions should also consider using these methods to improve their internal democratic processes as well as to support and gain experience in the use of ranked preference voting.

5 Other types of PR exist, most of which rely on political parties, not individual candidates. STV, however, avoids this limitation, allowing it to be used for non-partisan contests.

6 Iraq uses a closed party list form of PR, and even requires 1/3 of the elected candidates to be women (surpassing the gender equity of Congress). Afghanistan now requires a majority vote for presidential elections, and will use STV for its parliamentary elections.

7 Philadelphia also uses limited voting for the at-large seats on city council, and it is also used by election district boards.

To allow for these new methods, we will need to update our election equipment and vote tabulation system to support ranked preference voting. Here in PA, county governments are in charge of managing and conducting elections and therefore control the critical parts necessary for reform, including the voting equipment, vote tabulation, and results certification. This creates a complicated situation, because all of these things need to be changed significantly to enable the use of ranked preference voting. Hopefully the county will respect our desire for a deeper form of democratic governance and stand behind our efforts to achieve this goal.

The technical process of ranked preference voting includes two critical procedures: capturing the votes during the election and counting the votes during tabulation. The bad news is that our current election system doesn't enable support for either of these requirements. To make the necessary changes will require a combination of cooperation, creativity, and capital.

To vote, we now use the Danaher (Shouptronic) model 1242 Direct Recording Electronic (DRE) voting machine. It is one of the earliest forms of electronic voting machines, designed to replace the even older mechanical lever voting machines. This particular model is approximately 15 years old. Voters utilize a full-faced ballot and make their choices by touching designated areas on a large electronic board for each contest. The votes are then electronically stored on several chips and cartridges, with no paper ballot produced. The way the machine is designed makes ranking ballot choices not possible. While several choices can be selected, like for at-large or limited voting contests, there is no magnitude associated with the votes. Therefore, a substitution or replacement must be produced to allow for vote ranking, and there are quite a few options available.

Perhaps the most popular alternative, already in use in 24 counties across the state, is an optical scan (or optiscan) system that uses paper ballots. Each precinct would have a unit, and voters would fill out their ballot by hand and feed it into the machine, which will check the ballot for certain mistakes and store it for further processing. This is what is used in Cambridge to support their ranked preference voting. The cost for one of these units is around $5,000; with almost 50 precincts in the city, the cost would end up about $250,000, plus the additional costs of fold-up privacy booths, ballot printings, training, and other administrative materials. Hardly an expense, this should instead be seen as an investment into a better democratic process. An even cheaper option removes the need for optiscans from each precinct, so that the only thing necessary is a central scanner. The downsides of this approach include not being able to catch ballot errors such as overvotes at the precinct, plus it lessens the cross auditing capability produced by the precinct totals.

Other solutions exist, like purchasing newer DREs, but the cost involved would skyrocket. This is because you would need several DREs for each precinct, which can cost between $4,000-8,000 each. On the other hand, a single optiscan machine can easily handle up to 10 different voting booths per precinct, and still cost cheaper overall factoring in the cost of ballot printing and fold-up privacy booths. Optiscans are also more durable and long-lasting, and prevent the huge risks of damage and malfunctions associated with DREs. Finally, optiscans also provide a voter-verified paper ballot, which is increasingly advocated by many computer and election experts as the only way to ensure the integrity of the votes. During the primary election in 2005, some Danaher DREs lost votes in Reading, skewing the results by over 100 ballots. Having paper ballots would have better prevented this error, since the ballots are tangible materials and are less likely to simply vanish like electronic data (assuming detailed chain of custody procedures are followed).

The tabulation system will also need to be replaced. What this system does is count the ballots and generate the final results in a highly automated way. Currently, a commercial tabulation system that supports both IRV and STV doesn't exist, as vendors don't see it as a priority. While the counting and vote transfers might seem complicated to the average voter, someone familiar with these methods can manually tally the votes and produce the results with a spreadsheet or even a calculator and notebook. The optiscan machines can help as well by producing cumulative totals for each each precinct and generating digital vote totals for faster input and processing.

Alternatively, a more attractive solution is to have the central tabulation system be openly developed and maintained by our own community, for a much lower cost than would be incurred by licensing it from an outside company. To do this, our own programmers, political scientists, and election officials can work together to design and implement the necessary solution. And they wouldn't have to start from scratch, either; there are a number of existing open source software projects for vote counting being developed, and perhaps even the official software Cambridge uses could be adapted for local use. Whatever method is used, the source code of the system should always be publicly accessible and auditable to help prevent fraud.

So how will we afford all these changes? Don't expect much help from the state or Congress; with the current political and economic climate, the long-awaited Help America Vote Act looks to become another unfunded mandate. In fact DeForest Soaries, the first chair of the newly created Election Assistance Commission, resigned from the post in 2005 citing frustration from a lack of commitment from Congress to support the HAVA reforms. The good news is that a better solution can be crafted ourselves. This money should be appropriated in next year's budget, even if it means freezes or cuts elsewhere; it deserves to be the one thing to get a spending boost. By working to immediately enact the economic reforms detailed in part two, more than enough revenue can be generated to properly fund our democracy. And if there is one thing governments should do and do well, it is elections.

Another approach could be to have a local development team also create the voting equipment, too. The truth is that most touchscreen DREs are nothing more than custom built PCs, except they tend to cost 4 to 8 times more money. The talent and skill to pull this off certainly exists in our community, especially the colleges and trade schools. Some countries, like Australia, have successfully developed their own equipment using components such as the Linux operating system and trailing-edge PCs (which could be donated by local businesses). An innovative system being developed by the Open Voting Consortium expands on this concept by including a ballot-printing system that generates a paper ballot from the computer-aided selections and can be verified by the voter, ensuring the ballot's integrity. With enough investment and planning, such an operation could turn into a profitable business venture. What could be better than both improving our democracy and increasing economic development?

For a more radical consideration, the way ranked preference voting works could eliminate the need for primary elections completely, saving a large amount of taxpayers' money. With turnout consistently reaching its lowest point during primaries, it's hard to argue why they should continue to be held. Any candidates wishing to run would be listed on the election ballot, and the ranking process would instantly produce a list of winning candidates with the largest amount of voter support. And since these happen every other year, the county could finance the necessary equipment purchases now with the expectation of future drops in expenses. There isn't a much better deal than that.

With the right to vote finally becoming well established, it's time to guarantee the right to representation. To ensure this, not only should ballots be accurately and transparently counted, but the resulting votes should be transformed into real representation, never wasted. It's hard to understand how we can have one without the other.

Democracy can also be expanded to help in other ways. Like most communities across the country, we are suffering a growing amount of challenges concerning our young people. School drop out rates continue to rise. While crime is going down overall, violent youth crime in our community is going up at an alarming rate. Our best and brightest students are heading out for college never to come back, leaving behind a rapidly aging population and workforce. The list goes on and on. But while many people continue to view our youth as a big problem, they are truly our best—our only—hope for a better future.

Therefore, one of the most important efforts to redirect the course of Reading's future is to empower today's youth to see through tomorrow's possibilities. The Peirce report recognized our youth as "an immense civic resource, waiting to be tapped" and "a catalyst, a conscience, a thinking force to be heard and respected. Teenagers and young adults in their 20s are the group with the strongest stake in the county's long-run future. They should have the most right to demand better outcomes."

The report goes on to mention many excellent ways of getting young people involved in day to day work of community building and policy making. These ideas deserve immediate renewal and should be part of every effort documented here. However, the existing opportunities to make our youth real stakeholders do not go far enough. **The strongest voice that can be given to any group is the power of suffrage, and for this reason we should work to lower the local voting age to 16.**

There are few, if any, good reasons for denying this right. In fact, young people at the age of 16 possess many of the central rights and responsibilities given to adults:

- They have the ability to work, and must therefore pay taxes
- They can begin driving, even independently after a probationary period
- They can legally drop out of school if they so choose
- They can declare themselves independent of parental or guardianship authority
- They can choose to marry
- They can operate firearms under supervision and in legal manners such as hunting
- They can be treated as an adult for many forms of crime

Regardless of the justifications however, historically there has always been a large amount of resistance to expanding suffrage. Some of the most common responses to this recommendation include:

- They aren't mature or informed enough to make such important decisions
- They will be easily influenced by their parents or guardians and the media
- There just aren't that many issues that directly relate to them
- They barely vote when they turn 18, so why would they care now?

The interesting thing about each of these concerns is that they've also been leveled against native Americans, slaves, women, and 18 year-olds as well, and in all instances proved to be overstated if not entirely wrong. Let's examine each assumption in turn.

Questioning the maturity or intelligence levels of youth in their capacity to vote effectively is a perfect example. Besides being a clear violation of the 1965 Voting Rights Act, it quickly becomes a slippery slope if even casually employed as a litmus test. Are most adults mature and intelligent enough? It wouldn't be a stretch to wager that the average student fresh out of 10th grade Civics class knows more about the structure and function of government than most adults. Should we expand that criteria to people of truly limited mental capacity, such as the mentally retarded, people with severe head injuries, or seniors suffering illnesses such as Alzheimer's?

In fact, the sad nature of our current winner-take-all electoral system puts the most power in the worse hands of all: those groups of swing voters that get more attention during campaigns than any of us and still go to the polls still uncertain of who or what to vote for. Often times they base their decisions on sound bites, campaign materials, candidates' appearances, familiar names, or single hot-button issues. Even worse, most hotly contested elections are narrowly decided by swing voters, not well-reasoned and informed voters.

Like the same concern directed at youth, it was also thought that women would effectively become a second vote for whatever the political preference of their husbands or fathers. It's been proven that parents do have a profound effect on their children's preferences, not just for political leanings and voting habits but also religion, culture, spending habits, and other important areas. Yet interestingly enough, many teenagers at this point in life actively reject much of their upbringing, making predictions almost impossible. It is arguably much easier to predict voting patterns in adults based on their race, gender, income, media preferences, religion, or even geographic location.

So while voters base their decisions on a variety of issues and influences, the bottom line is that it shouldn't matter as a basis for the right to vote. Voting is generally known as something that is "exercised," thus the more opportunities youth have during their developmental years to practice the skill of informed decision-making, the better. If youth could vote, the lessons taught in Civics and U.S. Government classes would have immediate personal relevance, something extremely lacking in these subjects. The benefits of this alone greatly outweigh the risk of a few more uninformed, immature voters.

Additionally, it is absurd to think that many issues, especially those addressed through local policy, don't affect youth. While growing up, youth experience more rules and regulations than just about everyone outside of prison. To their credit, many teenagers currently are or would be extremely interested in these things if they had more say; they might even become more cooperative in addressing problems, too. In the information age, many youth know more about what's going on around the world than adults ever did at that age. Voting would only help to increase their interest.

Now let's take take a hard look at the issue of voter participation. Most people assume that general apathy, which can be admittedly common in teenagers, will always translate into low youth voter turnout. The general axiom this is based upon is the turnout of existing voters typically between the ages of 18-25, and the argument that follows is that lowering the age again won't provide a marked difference overall. There are a few problems with this assessment.

Firstly, most young people turn 18 right around the same time that they make major transitions in life, such as moving out onto their own or going off to college. No matter how simple it appears, college students continue to struggle with absentee ballots (as do transient adults), and are generally far removed from the issues and candidates up for election back home (unless the general election is a presidential one), creating little incentive to take the effort and vote. Many 18-21 years olds that do wish to vote end up being turned away because they didn't realize they weren't registered correctly (or at all).

Surely better education and advocacy from state and local election authorities could help, but the main point is that the timing is all wrong. Should youth be able to vote as soon as they turned 16 (and be able to register well in advance), that would give them about 2 full years, and between 2-4 elections worth of experience. An additional administrative tool could be compulsory registration through the schools, similar to lining students up to get library cards. By 18, they'd be better prepared and would have gained the working experience to know how to (and want to) update their registration and request absentee ballots.

Along the same lines, the age of 18 is bad for another reason. When the voting age was first lowered to 18 in 1971 through the 26th amendment to the U.S. Constitution, the initial youth turnout was over 50%. Since then, however, it has continued to decline steadily, although the last two national election cycles have seen an encouraging surge in participation. A growing belief among voting rights experts is that 18 is too late.

As mentioned before, voting only becomes a natural habit through its exercise. Because teenagers generally have such little control over the decisions that govern their daily lives, by time they actually gain independence many are convinced that this will always be the case and see little reason to think their voice—and vote—are worth anything. As we've seen above, although strong arguments can be made that most votes don't actually count and true democracy doesn't exist in our current electoral system, denying young people the opportunity to experience the power of choice reinforces this belief and prevents even the desire to seek a genuinely democratic future.

Finally, it should be reminded that young people aren't the only ones failing to regularly exercise their right to vote. Over the last 60 years, voter turnout in general has experienced terrible declines. Probably the most significant example is school board election turnout, which rarely breaks 20% of registered voters. Here is a situation where adults have clearly failed the youth. While it's true that many traditional forms of parental involvement such as PTAs, school board meetings, and parent-teacher nights are in decline, apparently hardly anyone is even concerned enough about our kids' education to mark a ballot and at least put good leaders in charge. Not only do we deny youth a voice, we then choose not to even speak for them.

So can municipalities—especially those operating under Home Rule—legally lower the voting age for local elections? This is a question that will require greater legal review and a major grass-roots movement. Most likely it will involve changes in state law, and support might be gaining in Harrisburg. Recently, the state House passed a measure to allow 17 year olds to register to vote if they will turn 18 before Election day, and a large number of PA's Congressional delegation support a constitutional amendment to lower the federal voting age to 17. The best approach however—like many experimental democratic reforms—should come from the local level. Reform efforts on other levels are costly, lengthy, and often have little chance of passing. Let's allow municipalities to try it out, and then decide if we should apply it state-wide.

Outside of PA, the debate for lowering the voting age is also raging on. New York City and Cambridge have been considering it, and there are bills sitting in the legislature of many other states to do just this. Behind these efforts are the National Youth Rights Association and other youth groups, who see the expansion of youth rights as a next step in the civil rights movement. If history is any guide, the next generation of civil rights proponents will also face a considerable challenge in attempting to secure this reform without our support.

Even if the laws are currently interpreted to restrict youth from voting in local elections, it would still be critical to involve them in every step of policy development. Regardless if they can legally vote or not, an excellent way to integrate them into the process is by creating youth advisory seats on city council and the school board, and as many other governmental, private, and community organizations' boards as possible. Even if many of these seats must be non-voting, as would be for bodies of elected policymakers in municipal government, they would provide several important benefits.

Firstly, these organizations would gain direct input from the youth and help them feel like their ideas and concerns truly matter. This is especially true for city council and the school board, whose policies have a huge impact on their daily lives. Often times the interests of adults and youth come into conflict, and are usually due to little more than misunderstandings. The more often and closer together the two groups could work, the chances of enacting mutually agreeable and reasonable policy greatly increase. From major issues such as gang violence and curriculum development to lesser ones like skate parks and curfew laws, young people will feel much better having been part of the process.

Secondly, there are few better opportunities than this to foster strong leadership skills. In these positions youth will learn the critical skills of debate, negotiation, lobbying, and planning. Youth apathy and rebellion are closely tied to the fact that young people lead the most regulated and undemocratic lives of all groups in society. By creating new channels for communication and opportunities for real involvement, we can instill a sense of civic pride and prepare the next generation for the immense challenges that await them.

Lastly, there is one argument good as any for getting the youth involved as much as possible: it is their future that is being planned, after all. Help them look forward to what lies ahead by permitting them to contribute to charting the course. All across America, communities such as ours are losing their children to far off places after they grow up, leaving behind empty nests and aging populations. What better way to keep their hometown appealing than by allowing them to design the types of jobs, neighborhoods, government, economy, social activities, and environment they'd like to end up in? But don't stop there. **Consider rewarding their contributions and achievements with education, employment, and housing assistance.** Make Reading a place where staying or returning to town has a large incentive for our best and brightest, and isn't just a fond memory in their minds or a place they visit on holidays. The more we invest in our children, the more we invest in the future of both our community and our world.

Public Commissions

Our city government operates under what's called a strong mayor/part-time council composition. Besides the Mayor, who works full-time with a team of administrative staff, City Council also serves a very important role, creating local policy and law as well as oversight of the city budget. To handle regular business, council members meet twice a month and serve on several of five committees, each of which meets at least once a month. There is also an open work session held once a month used for planning and discussion. As you can imagine, this all requires a large amount of each member's time and energy, even with the assistance of city staff.

With the huge amount of important issues constantly demanding attention from city council—ones that often require prolonged research, deliberation, and even expert consultation—it's almost impossible for such a small and time-limited group of elected citizens to handle it all. To help manage all these matters, a number of boards, commissions, and authorities were set up at various points in our history to assist city council and the various government agencies through advisory and oversight roles. Some of these bodies include the plumbing and electrical board of examiners; zoning hearing board; library board of trustees; water, transportation, redevelopment, housing, and parking authorities; planning and human relations commissions; and most recently, the legislative aide committee.

In addition to distributing the work load, these groups help to keep members of the public actively involved and part of the process of daily governance. Many of them provide good resources of expertise and focus in specific areas and make regular policy recommendations to city council. In short, they're a very good thing for democratic governance. **To increase public participation and ensure the quality and effectiveness of policy and governance, the city should consider strengthening the roles and expanding the number of such public commissions.**

One particularly impressive model of such a network of public involvement can be seen in Berkeley, CA, which has developed over 40 commissions. To Reading's credit, which currently has more than 25 such bodies, the city is definitely on the right track. What is proposed then, is to perhaps reorganize and modernize existing commissions or even create additional ones. Many of the concepts explored in this paper can provide a good start.

The goal of the commissions should be to address as many important issues as possible. If we are committed to empowering our youth, then why not institute a youth commission to give young people another voice? If we are going to work to bring true democracy to every level of our community, then we should create a democracy commission to oversee the fairness of campaigns and elections. How about an energy or sustainability commission? Surely such areas deserve at least the same attention offered to the stadium, animal control, and shade trees.

And if the number of available commissions ends up doubling, can we be certain that enough citizens will become immediately interested in participating? Of course not. Most citizens aren't even aware that these commissions exist. And if they are, they might not have time to get involved due to the demands of long work weeks—something that could change with a better local economy and higher wages. Also, the slow yet steady erosion of civic participation will take time and effort to reverse, but we must always be committed to this goal. One helpful way to address the problem is to better promote the commissions, and ensure visible recognition is always given when they aid in drafting new policy or make good recommendations to improve services or budget spending. People need to know their efforts will be valuable and effective, and that such opportunities for participating exist.

One existing commission that urgently deserves renewed attention is the city's Human Relations Commission. Practically defunct, it has served the community for almost 40 years by investigating community discrimination issues in areas such as housing and employment. It once operated in conjunction with the county's Human Relations Board, which was also slashed from the budget several years ago and left the city's commission as the last local place to turn for discrimination cases. These groups weren't dissolved because racial tension and other forms of discrimination have disappeared, however:

- Almost every crime committed—especially in the city—seems to have been done by a black or Latino male, which doesn't help to counter common perceptions.
- Some school districts in the county have been dealing with the hot button issue of students displaying the Confederate flag, which might be a reaction to the growing number of minorities transferring to these once racially homogeneous areas.
- Surprising to many, Berks County has a long history of Ku Klux Klan and Aryan Nations activity.
- In 2003, the federal government took the county to court over language barrier issues related to voting.
- Tension also exists even among minority groups, who often see each other as a threat to their own way of life or whatever limited resources they have been able to accumulate.

These are not issues that simply heal with the passage of time, and our community must work to address all forms of discrimination, including race, gender, ethnicity, sexual orientation, religion, economic status, age, and disability. Reading is fast becoming one of the most diverse cities in the region, and with this major shift in demographics comes both challenges and opportunities. To produce the best possible outcome, it will be critical to empower the new emerging majority while also expanding racial and cultural awareness. The most important step will be to provide the best possible political and economic opportunities to the minority groups within our larger community. Since the strategies used to do this are detailed all throughout this paper, much time on it won't be spent here. What needs to be emphasized however, is that like with our youth, it is critical to ensure inclusion of all types of people in the community in the process of reform. By being involved, they will be able to provide essential contributions to the development of solutions and also more supportive of the implementation efforts.

The city's Human Relations Committee can certainly help in these efforts. While its first priority should remain investigating cases of discrimination and enforcing the city's anti-discrimination ordinance, it should also continue to coordinate events such Unity Day and other positive programs that promote tolerance and social justice. The main reason the city's commission and the county's board were shut down was due to a lack of money, not support, so economic development will play an important role in reviving them. If funding can be renewed, there's talk of a tighter city-county partnership on the effort, which might also make it more effective.

Neighborhood Councils

For most people, participating in city council (or even one of the public commissions) is unappealing, especially due to the dry (but necessary) formality and rigid structure used to run most of the meetings. Additionally, it is not the venue to provide for extended dialog or debate on important community issues, especially ones concentrated in specific neighborhoods. **However, because more opportunities for citizens to stay involved are necessary, there is no reason to not organize democratically on lower levels in the community in the form of neighborhood councils.**

There are many useful roles such groups can assume. First, they can be an excellent way to facilitate revitalization progress in the different parts of the community. They can help identify and monitor important community indicators or assets and can help coordinate efforts such as crime watches, social/cultural events, local business development, and housing needs. In Maryland, certain types of neighborhood groups are actually given legal authority to enforce municipal ordinances by taking violators directly to court, efficiently bypassing often-complicated city complaint procedures (and small fines) and resulting in heavier court orders for offenders. By empowering neighborhood residents to better address their own needs and problems, more responsive and lasting change can be made.

Another important role would be to provide knowledge and ideas to the public commissions, city council, and the mayor regarding neighborhood matters. This would be especially useful should the city move to a superdistrict for city council elections. Such a combination would provide the optimal situation of both a highly representative democracy for the whole city and still ensure active attention to the many important issues affecting each neighborhood. Leaders from the neighborhood councils could provide a steady stream of potential candidates for city council to ensure the diverse issues and concerns across the city stay important, both during and after elections.

So how should these bodies be structured? That should be up to each neighborhood. Ideally, a New England "town hall" style council should be chosen, with a large number of democratically chosen members. Voter rolls from the county listing registered voters for each neighborhood can be used for the elections, which should be conducted by the neighborhood itself and at a time other than the regular election dates. This would also be a way to allow youth involvement in the face of official election restrictions. STV should be used to determine the winning candidates, regardless if it has yet been implemented by the city or not; this would provide an excellent testbed to demonstrate and grow support for ranked preference voting as well as to practice conducting such elections.

In order to form neighborhood councils, we've already got a good start. A large number of actively concerned citizens are working every week to improve their neighborhoods, make their streets safer, and help support each other. A small sampling of these groups include the Center City Community Organization, College Heights Community Council, First Ward Concerned Citizens, and Community Hope of the 6th Ward. With a bit of organizing, training, and other important support, we can begin laying the foundation for an active, democratic, and citizen-lead civic revival.

To further extend communication of important issues facing the city, serious consideration should be paid to the creation of a city-wide citizen assembly, with delegations from each of the neighborhood councils. This body could meet as necessary to discuss urgent issues and present updates on progress made in each neighborhood. It could also become an effective lobbying force on City Hall, used to ensure that important issues are properly addressed by the officials. As you can see, the potential to deepen democracy within our community is great, and every effort should be made to reignite healthy civic participation.

Intergovernmental Cooperation

While the rest of this plan calls for looking within our community for solutions, here is one clear area we need to look outside. There are many reasons to maintain strong relationships and work closely with other communities. No matter how independent we can become, there will always be things outside our control or beyond our ability. Additionally, as we'll explore in more detail later in the paper, establishing relationships with a wide variety of other communities will allow us to exchange ideas, work together on large challenges, and jointly plan the future.

This will take some serious effort, however. Unfortunately, many of the county perceptions mentioned in the Peirce report still exist. While the number of businesses and home owners in the city continues to decline, suburban sprawl continues unabated. Even with the exciting new offerings downtown, many people still stay out of the city. The problems of drug-related crime, while mainly fueled by outside demand, continue to be a lone internal battle. It's time to put an end to Reading's isolation in addressing critical regional issues.

A good way to begin would be to establish a Council of Governments with the municipalities neighboring the city boundaries, as a first step in strengthening the poor relationship between the city and the surrounding county. While most of the proposals included in this plan don't require outside involvement, the neighboring municipalities and the rest of the county could certainly stand to benefit. From transportation to taxes and crime prevention to waste management, greater results can be gained through better relations and regional planning. Indeed, much of the economic and environmental recommendations detailed below would have a greater impact if implemented on a larger—perhaps even county-level—scale.

In fact, this should be the long term goal. While it is important to pursue self-reliance to safeguard each community from outside forces, it is also critical to be prepared to work together with other communities to tackle challenges such as natural disasters or creating economies of scale, and the county is a natural unit for such a configuration. To assist in coordinating efforts, the Intergovernmental Cooperation Law (Act 177 of 1996) was enacted to complement the provision of similar name in the state Constitution. The language of the act is quite broad, including any function, power, or responsibility under a municipality's control. What this essentially means is that if a municipality has the jurisdiction to take an action or deliver a service under the provisions of its code or charter, it has the power to cooperate with other municipalities in doing so.

Other areas to look for collaborative opportunities might even exist outside the county, state, or nation. While the ideas included in this paper are innovative, none are completely original and most have been tried elsewhere. Therefore, it would be a good idea to establish relationships with other communities working on the same types of reforms as us to exchange ideas, monitor progress, and even learn from each other's mistakes. Becoming a member of international groups such as the International Council on Local Environmental Initiatives's (ICLEI) Local Governments for Sustainability association will help us explore new developments and solutions from creative communities across the globe.

Besides learning from others, Reading can help to further spread this knowledge. **One way to do this is to adopt a city in a developing nation and create a municipal exchange program, not unlike the ones operated by schools.** In such a situation, officials and citizens from the foreign community would travel to Reading and learn about the kinds of things we're doing in the areas of democracy, economics, and the environment. At the same time, a group of our people (especially some youth) would venture to the sister city, learn about the people and culture, and help them address some of the fundamental challenges they face. Such a program could be incredibly rewarding, expanding cultural awareness and helping other communities become better places to live and work. Every several years, a new community relationship could be created.

Though many people might not know, this type of program has been going on for some time here. Twelve years ago, a sister city relationship was established with Changzhi Municipal People's Government in Shanxi Province, China. The relationship was first started by the local firm Dimensions, Inc. and has expanded into a collaborative project between the two cities. In November of 2004 a fifteen member delegation led by Deputy Mayor Heping Ma paid a visit to Reading, which was hosted by Mayor McMahon. Hopefully this relationship will continue to develop and offer both communities new cultural, economic, and ecological insights.

Even back home, there are other ways to encourage further change. If the city becomes successful enough in enacting and benefiting from these reforms, other municipalities won't be able to help but become interested. **To best facilitate this transition and become a leader in the region, Reading should consider forming a state-wide "League of 21st Century Cities" and kick off our efforts at reform with a municipal conference, continuing to highlight subsequent successes with future events.** Remember, hardly any of these ideas have yet been implemented here in PA, so Reading's pioneering work could help it become the next "model municipality" if it's serious about change.

Lobbying for Real Home Rule

Two dynamics will invariably come into play in our quest for a better future. The more we realize the power of local control, the tougher it will be to enact innovative policies in the face of county, state, national, and even international restrictions. **Therefore, in order to represent our best interests and ensure our long-term success, we'll need to maintain a strong lobbying campaign, spanning from the county building, to the state capitol, to Washington, to the U.N. and other international groups.**

From the railroad labor strikes and socialist political movements in the 19th and 20th centuries to recent protests and lawsuits against the PATRIOT Act and No Child Left Behind Act, the city has long been a vocal advocate for the things it believes in. We as a community need to re-ignite that spirit and resolve in order to take on the many obstacles to our efforts at democratic, economic, and environmental reforms. We also need to understand the ramifications of state, national, and international policies and be prepared to not only work around them but also to work to change them if necessary.

Existing organizations such as the National League of Cities and the Pennsylvania League of Cities and Municipalities are natural allies in this effort. These groups help to represent and advocate city interests in the state and nation-wide, helping members share ideas and address common challenges. Reading should maintain a strong presence within such organizations and work to promote these reforms among other cities, building alliances and influencing policy on the state and national levels. It's time to be vocal for local interests.

One of the most important efforts will be to maintain the integrity of the Home Rule Law. While present restrictions on local control are fairly loose this may not remain the case; determinate court rulings and legislation are bound to appear, especially if communities like ours seek to push the powers of our charters to the limit to protect our future. As we've seen from Part I alone so far, there are concerns about possible restrictions on the voting age and elections. Additional restrictions also exist in important areas such as taxation, commerce, transportation, and environmental regulation.

To effectively monitor risks and promote necessary changes to the Home Rule Law, Reading should form a coalition with other home rule local governments to lobby their state and federal legislators. Harrisburg and Washington should be pressed to establish clear floors—not ceilings—for powers vested in local government, especially in the many areas acting as unfunded mandates. And when our communities are offered appeasement in the form of contracts, grants, and subsidies, we should remind them that we demand more power from our representatives, not pork. We also need to be aware of the very real local impact of foreign policy, and seek to become influential in these critical matters.

It's especially important to have full support of the county government. Their resources and expertise in the areas of elections, planning, economic development, property assessment, transportation, human services, agriculture, conservation, and many other areas are vital to our revitalization initiatives, so they must play a leading role in efforts to promote and extend democratic governance, economic self-reliance, and environmental sustainability throughout the region. **Perhaps the best way the county could serve the municipalities in these efforts is by**

also converting to home rule charter. Although the reform initiative failed 15 years ago, the time has come to reconsider this important issue.

Since its founding in 1752, Berks has been operating under the "stock" form of county government designated by the state (though it has evolved over time). Known as the "Third-class County Code," the structure of county government calls for three commissioners, a controller or three auditors, a district attorney, a treasurer, a sheriff, a register of wills, a recorder of deeds, a prothonotary, and a clerk of courts. And although it has existed in its current form for so long that hardly anyone understands how or why it works this way, important issues still exist that need to be addressed.

The biggest problem stems from the county government's fundamental organization. This is most evident within the Board of Commissioners, who serve as the chief governing body of the county. In their role as commissioners, these elected officials are given statutory authority that is both legislative and executive. Besides the obvious abilities to make motions to the board and control the county budget, additional legislative powers granted include the adoption of ordinances and resolutions, which can be used to establish local laws and declare the general will of the county government. Additionally, commissioners have significant administrative duties and regulatory power and are responsible for control over all county personnel, policies, and procedures.

Such a complicated configuration can (and often does) create significant problems. Unlike almost every other level of government, there lacks a clear delineation of executive and legislative roles, which removes an effective method of checks and balance of power. Instead, a mechanism internal to the Board of Commissioners is provided, which while might ensure a check, never can provide a balance. This rule states that no matter which party holds a majority on the board, there will always be a seat available for the largest political minority (as in the case of Berks having two democratic commissioners and one republican). What this generally means is that there should be a dissenting member on the board, who is more cautious (or even resistant) to the actions proposed by the majority members and who can bring alternative issues, concerns, and ideas to the table. While the concept of majority rule with minority representation is fundamental to a true democracy, the current system is a poor and outdated implementation of this important political principle. Today, this structure only adds partisan and personal conflict to the decision making process.

Besides hindering policy, conflict can also spill over into the many administrative functions, causing daily business to be stalled or blocked and leaving no one fully accountable. To help address this, a position of managing director was created to help reduce administrative burden. While this has helped to professionalize management of day to day operations, it doesn't solve the fundamental problem of having an archaic governing body preside over a county government far beyond the size and scope of the organization that existed when the county was established over 200 years ago. Disputes still continue over how much responsibility should be given to the managing director—something that should already be clearly defined.

To many, the role of the row officers are also outdated. While the roles of the sheriff, coroner, district attorney, and financial officers such as controller, treasurer, and auditors are relatively easy to recognize, others such prothonotary, register of wills, recorder of deeds, jury commissioners, and clerk of orphans' court are obscure 19th century holdovers. Of the small minority of electors that actually turn out to vote for these positions, few know or care what their jobs are, and most simply support whatever candidates are nominated by their party. Because of the political nature of these positions, there are significant risks of partisanship and patronage within the departments. Those in favor of government reform believe that by converting, consolidating, or even abolishing many of these departments, improvements in efficiency, professionalism, and accountability—as well as a reduction in bureaucracy and government spending—can occur.

Citing these and other issues, an effort to address the problems of county government took place between 1990 and 1993. With the support of the existing commissioners, a question was put on the ballot and voters approved the formation of a government study commission by an almost 2-1 margin (65%). After several months of research, hearings, and visits to other counties, the 11-member commission unanimously supported a move to county home rule and set about crafting a new county charter. Similar to the city, a home rule form of county government would place more local control in the hands of county residents and allow them to create a government fine-tuned to local needs and conditions.

Under the proposed charter, the Board of Commissioners would be replaced with an elected 9-seat county council, with 8 of its members serving part-time and a full-time chairperson. The council would retain legislative powers and appoint a full-time county manager to the day to day administration of county government. The positions of district attorney, coroner, and sheriff would be retained, while the other row offices would be phased out.

A uniform administrative code would then be enacted, detailing the organization, administrative structure, policies, and procedures of the county government, and would be required to apply to all elected officials, departments, and agencies. The heads of county departments would be appointed based solely on professional experience, would report to the county manager, and would need to be approved by the council. All county personnel would be hired and promoted through a merit-based system, and a professional human resources director would handle all personnel responsibilities. Additionally, engagement in partisan political activity would be prohibited, and an extensive Code of Ethics would be enforced to further prevent corruption.

To prevent ballooning county government expenditures, annual budgets must be balanced to pass and 5-year financial plans must be regularly presented. A Department of Finance would replace the responsibilities of the controller/treasurer/auditors and must be headed by a qualified finance director. To monitor spending, an independent internal auditor would continually track all funds and programs, and an annual audit would also be conducted by a third-party.

To ensure accountability and help keep control of county government in the hands of the people, voters would be granted the powers of initiative (propose ordinances), referendum (suspend or recall ordinances), and recall (remove elected officials from office).[8] To keep elections competitive, term limits would be placed on all elected seats. Additionally, municipalities' power and autonomy would be protected from unnecessary county expansion and interference.

8 Unfortunately, the power to recall elected officials in Pennsylvania was declared unconstitutional in 1995. This also applies to the recall provision in the city's charter.

When the final draft of the charter was produced, the two camps supportive and opposed to it formed immediately. After a lengthy campaign, the charter was put before voters in May of 1993 and defeated 57-43%. While one could simply sum the result up due to Berks's notorious insistence on the status quo, it would probably be better to learn from and properly address some of the most vocal concerns of the home rule proposal.

When asked about the results, a member of the Citizens to Protect Voters' Rights—the group opposing the charter—explained that there was nothing wrong with our government that greater public participation wouldn't cure. Perhaps more than anything else, herein lies the fundamental problem. Besides the people that would lose their job under the new charter, most of the opponents were afraid of losing their voice, and believed that a system not broke needs no repairs.

But the sad truth is that the system is badly broke and may be beyond repair. County wide voter turnout for the charter approval—probably the most important type of local election possible—was a pathetic 34%. Worse yet, only 27% of the electorate felt motivated to even vote on the charter. The lack of participation in the charter ratification itself is evidence enough that democracy is failing county-wide, and a renewed home rule effort could help reverse the steady decline.

Perhaps the biggest issue with the proposed charter's solution was that it didn't properly address one of the main problems it sought to solve. Under the new charter, the county would be split up into six single-member districts, but voters would only be able to vote for four, strikingly similar to the current elections for county commissioner. Coupled with the reduction of directly elected officials overseeing other areas of the government, many voters became concerned that they would have even less control within such a structure.

To address this problem, we should revisit the election reform recommendations proposed above, making the entire county more democratic and representative. Instead of six single-member districts, the county council should form a superdistrict, allow voters to vote on all seats, and perhaps expand the number of seats to 12. By moving to ranked preference voting, the maximum representation would be allocated, ensuring the will of the people is mirrored in the elected body and providing all the natural benefits of proportional representation. Most importantly, voters wouldn't be penalized by where they live, and the county would also benefit from higher voter turnout, better campaigns, more choices, and greater accountability. Additionally, the county manager should be elected (also using ranked preference voting) as county executive and better balance the actions taken by the county council. These modifications, along with the new powers of initiative and referendum, would offer a form of democratic governance that surpasses the current system in every aspect.

Reading can help this effort by showing that home rule governance can be extremely effective. Most people don't understand that moving to home rule alone doesn't solve the problems of governance. What it does is place more control of a community's—or county's—future in the hands of the people most affected by it. And if that community or county seeks to better safeguard their future through democratic governance, economic self-reliance, and environmental sustainability, greater local control will be essential to their efforts and these priorities should be reflected in the structures and functions designated in the charter.

Part II: Economic Self-reliance

"Do what you can, with what you have, where you are."
–Theodore Roosevelt

"Local production from local resources for local use."
–E. F. Schumacher

"It is absolutely impossible to have participation in a gigantic system; it can only occur at a human scale—in other words where people have a face and a name, where they mean something to each other and are not simply statistical abstractions."
–Manfred Max-Neef

The word "economics" literally translates into "managing the home," or in our case, managing our community. It is the science of managing the production, distribution, and consumption of all the things important to our lives. While it cannot directly determine what our needs are, it is an indispensable tool to help us decide. Once these needs are recognized, economics can be used to meet them efficiently, equitably, and cost-effectively.

The term "self-reliance," often associated with ideas of isolation or individualism, instead should be seen as meaning a sense of personal responsibility, harmony with each other and nature, and concern for the welfare and future of our entire community. It means not relying on others to solve our problems and instead turning our challenges into opportunities. Community self-reliance is the goal of reducing the many threats to our community from the outside world. This doesn't mean attempting to wall ourselves in; instead, we should strive to become resistant to the many mistakes, misdeeds, and misfortunes of events beyond our control.

What kinds of threats does this mean? Obviously the forces of nature are always a large threat, and can pose a risk in a variety of forms, including droughts, fires, disease, floods, earthquakes, and tornadoes. While we should be as prepared as possible for such situations, the more common threats (though sometimes linked to natural disasters) occur from essentially economic failures in the production, distribution, and consumption of the vital necessities needed for our daily lives, such as food, water, energy, housing, transportation, jobs, health care, education, and money. Therefore, economic instability is the biggest threat to achieving self-reliance.

Instability is especially true in today's global economy. Problems halfway across the globe can cause major disruptions here at home, such as the cost and availability of oil or other products that rely on global distribution chains. Feeling the pressure to compete in order to remain viable, communities open themselves up to further vulnerability by trying to attract and invest in national and international corporations, only to lose significant amounts of jobs and a large portion of the tax base when these firms relocate due to mergers, restructuring, or because they no longer feel competitive enough in the community. This causes or exacerbates further problems such as poverty, crime, brownfields, and urban blight.

Since the only way to effectively address these problems is by rebuilding the tax base, a vicious cycle is created where more and more sacrifices must be made to attract new businesses. As Greg LeRoy explains in *The Great American Jobs Scam: Corporate Tax Dodging and the Myth of Job Creation*, a growing number of firms are actually pitting communities against each other, seeking out the highest bidder. Each time, larger and larger incentive packages such as tax breaks, abatements, loans and loan guarantees, industrial bonds, training grants, regulatory breaks, and site selection services must be offered, but rarely is the promise to stay committed to the community ever included. And even when a business decides to set up shop, should the profit margin sink too low or local environmental and labor regulations get in the way, all too often will the firm pack up and leave for reasons of "efficiency" and the need to remain "globally competitive," taking the investments, tax revenues, and jobs with it.

This situation, called corporate mobility, creates four fundamental threats to our community. First, it guarantees that the community will continue to suffer reductions in the quality and quantity of jobs, forcing workers and their families to either reduce their quality of life through lower-wage incomes or move out of town in search of better jobs. This is a major reason for social breakdown, turning once thriving cities and towns into "revolving door neighborhoods" and "bedroom communities." Second, the sudden departures impose major costs to the government, who has to deal with the resulting unemployment compensation, welfare benefits, ancillary business closings, and forms of social distress resulting from the weakening social fabric and economy—while losing the tax revenue needed to deal with the problems at the same time. Thirdly, mobile corporations can gradually destroy the local culture, spreading the same brands, stores, and services, which homogenizes communities and dulls people's perception of place. Lastly, it undermines a community's ability to plan for the future, tipping the balance of give and take between communities and businesses and turning communities into company towns.

We've seen all this happen in Reading time and again, from Dana Corporation, Agere[9], and soon possibly Penske—causing thousands of some of the best jobs in town to move out of the community or even overseas. Other losses such as the outlet centers have also resulted in significant damage to our economic health. With a new vision and effort at revitalization emerging, we literally cannot afford to put ourselves in that situation again.

At the heart of community economic development must be a focus on what is called the economic multiplier, a kind of "rippling effect" created by economic activity. Multipliers can be good or bad and provide less or more of an impact. Some activity, such as opening up a new business, has a positive impact, while other activity, such as closing a business, has a negative one. The new business will create jobs, increase the tax base, provide goods and services in the community, and continue to indirectly enhance the community's quality of life (although some businesses create more problems than they solve). By closing a business, especially a larger one, just the opposite rippling effect will occur, and often worse; besides reducing incomes, the tax base, and the available goods and services in the community, it could create a domino effect that causes other businesses to suffer or collapse. This is the fundamental problem with corporate mobility.

What we need then is a new strategy; one that creates greater self-reliance and a stabilized local economy through recognition of the dynamics of economic multipliers. To do this we'll need to

9 Reorganized from former Lucent Technologies operations.

reverse our current approach to economic development, improving our economy from the inside out instead. From taxes to way we use money itself, we must utilize different approaches—some over a century old, others on the cutting edge—and bring our economy (and our future) back under our control.

The framework presented is inspired by and adapted from a group of community economy and self-reliance pioneers including E. F. Schumacher, Ralph Borsodi, Michael Shuman, the Institute for Local Self-reliance, the Center for the Study of Economics, and the Community Information Resource Center. Addressing each of the topic areas below is essential to stabilizing and strengthening our economy, allowing it to become more self-reliant and resilient to the growing volatility of the global economy. For communities, attempting to become and remain globally competitive is increasingly becoming a no-win situation.

Local Taxes

Taxation is known as the "cost of a civilized society." It can be one of a community's biggest problems, and it certainly is here in Berks. However, it can also be one of its most effective tools for economic development when used correctly. Reforming our local tax structure is essential to creating a strong economy and must be the first thing done to spur major redevelopment. Perhaps unknowingly, our current tax policy hinders progress in many ways. We want more businesses here in the city, but then we tax them for the privilege of operating. We want many jobs in the city, but then we tax the privilege of working here. We want better wages for our workers, but then tax it away. We want beautiful buildings and neighborhoods, but tax any improvements to properties. People interested in buying or selling real estate are taxed. Even hotel stays and entertainment venues meant to attract outside visitors are often taxed. Besides corporate mobility, taxes on commerce are the strongest force driving vital business activity out of the community in search of more favorable areas. In many ways taxes destroy the very tax base they're trying to grow.

Even worse, the solutions proposed only add to the fundamental problem. For example, Act 72 is recently enacted legislation that seeks to provide property tax relief by funding school districts through unstable casino revenues—do we want to gamble on our children's future? The Commonwealth Caucus's "Plan for Pennsylvania's Future" includes a shift from local property taxes to a wider sales tax, the most regressive form of taxation; far from being "fair," it places the burden squarely on commerce and the poor (the least able to pay it). As in many other areas of policy, we can't afford to wait for a proper solution from the Capitol.

At the same time locally, although everyone recognizes the problem, no one seems to realize they can address it. Every time the citizens complain, the commissioners and many municipal officials bring up Harrisburg. However, blaming the state for this predicament is nothing but a bad excuse; through the provisions of Home Rule Law, the Local Tax Enabling Act, and other related legislation, the state gave municipalities the power to change their tax systems as they see fit. Compared to almost every other state in the country, Pennsylvania grants its municipalities some of the broadest powers for taxation. There's no need to point fingers elsewhere when trying to address this problem.

What we need is to adopt a new philosophy on taxation—one that can meet the needs of public finance while preventing counterproductive damage to either the economy or the environment. Instead of punishing progress, we should provide incentives. So in a nutshell, this means:

- Tax bads, not goods
- Tax waste, not work
- Tax what you take, not what you make
- Collection shouldn't be costly
- Formulas must be fair

Therefore, any tax reforms proposed should meet these criteria. From here there are many directions in which to proceed. So where should we start? Simply open the editorials page of the Reading Eagle any day, and chances are good that you'll find numerous pieces about the most hot-button fiscal issue facing the county: property taxes. Nowhere is tax reform needed more.

In 2002, the city administration attempted to reform the way it handled property taxes by shifting from an even tax on both land and buildings to a land value tax[10] (LVT), which taxes land at a higher rate than any improvements to it. Over a dozen Pennsylvania municipalities in PA, including Harrisburg and Allentown, have converted to such a system with much success, and it was hoped that the benefits of such a reform would help Reading, too. However in the time leading up to the council vote, confusion and concern about the LVT grew strong and it was voted down in the end.

To its credit, although it failed to pass, the city was on the right track in pursuing the reform. **A land value tax is essential to revitalizing both our neighborhoods and business districts, and provides the best way to both fund government services and boost economic development.** By better addressing the concerns and promoting the many benefits of the reform, we'll be able to get the community on board in supporting the tax. To do this, let's begin with some background.

The LVT was first widely promoted in 1879 by Henry George in his groundbreaking work, *Progress and Poverty*. George's inquiry was into how poverty and economic depressions could exist in the midst of America's rapid growth and prosperity. His conclusion, reached only after a careful and thorough examination, was that the answer is in the distorted economic view of land—the source of all wealth. In short, George called for a significant, market-value driven tax on land values (unearned income) and an elimination of taxation on the other means of production regarded as labor and capital (earned income).

In simple terms, this means two important things: (1) That taxing property is the only just, equitable, and sustainable way to collect government revenue; and (2) in taxing property, we should only tax the value of the land itself, not any buildings or other improvements made to the land. Flowing from this basic principle comes many additional benefits, the major ones of which we'll now look at in detail.

10 Also known as a two-tier, split-rate, two-rate, single, or site-rating tax.

First, let's consider the statement that taxing land is the fairest and most effective way of generating public revenue. At the beginning of this section, it was mentioned that our approach to taxation should be one that generally seeks to tax away bads and waste. By taxing businesses, workers, sales, and other activities of commerce, we're effectively taxing them away and penalizing economic development. Since land is of a fixed supply, there is no way to tax it out of existence and demand for it will only continue to increase with population and economic growth, resulting in increasing land value. Also, land and natural resources (and the value invested in or extracted from them) are considered the rightful ownership of society, whereas wages for labor and the resulting capital are considered the rightful ownership of those involved in producing wealth. In this sense, nothing is more fair than properly taxing the use of society's property and removing taxes from true private property. Furthermore, by eliminating taxes on buildings and other improvements to land such as irrigation, drainage, construction, remodeling, and crop growth, such activity will be further increased to reap the optimal return of investment in the land's suitability.

Such reasons alone should be enough to support the LVT, but the benefits further compound. The complexity of collecting the tax and the cost of the deep bureaucracy associated with taxes are dramatically lowered, saving both taxpayers and the government time and money. Additionally, tax evasion and the resulting time and cost of auditing would be greatly reduced or even nearly eliminated, since land is always in clear public view.

By taxing the raw market value of land, owners of currently vacant lots and dilapidated buildings would be pressured to either improve or sell the property. This would eliminate the damaging practice of speculation (where owners sit on empty buildings or lots for long periods of time, waiting for property values to rise from others' work before selling), a root cause of slums and other urban blight. And with more idle properties being converted into homes, apartments, offices, and other active real estate, the overall cost of property (and resulting property taxes) should actually go down for most residents and businesses, with prices becoming more realistic of market demands. At the same time, these competitive market forces would prevent the cost of the tax from being passed on in higher priced goods and services or rent hikes for consumers and lower wages for workers, keeping the tax highly progressive.

And with greater urban in-fill and redevelopment occurring, there would be less need to continue stripping off invaluable farmland and open spaces. Since land values are based on "location, location, location," there will be less pressure on family farms and other rural enterprises since their land lacks the necessary infrastructure and building out into the county will no longer be as profitable to developers. A LVT, together with updated zoning rules and transportation policies, could essentially become the most effective way to curb the problem of sprawl.

Since one of the primary sources of land value is its proximity to the community at large and the surrounding network of public services and infrastructure (roads, sewers, schools, utilities, police, etc.), the best thing a government could do is make major improvements to its services and existing infrastructure instead of building out into the green belt, thus increasing the value of the developed land and the amount of revenue available to be collected from the investments. This means that by improving roads and transportation options, upgrading energy and water supply lines, and providing better police coverage and street cleaning, these new services will become essentially self-financing. The benefits of this being applied to every corner of our city could be enormous, eliminating decay, stimulating redevelopment, and increasing tax revenues.

Finally, by placing larger taxes on land, we'll be able to stimulate our economy in the best way possible. **A land value tax, used to shift and raise the amount taxed on land (versus improvements to it), will allow for the additional reduction and eventual elimination of other local taxes, including the business privilege, occupational privilege[11], earned income, real-estate transfer, amusement, and per capita taxes.** Known as Act 511 taxes, maintaining and raising rates on these taxes will stunt or even damage the city's ability to stimulate growth of its assets. By working to get rid of these harmful taxes and investing in infrastructure and public services, the entire city will become a major enterprise zone and one of the best places to live, work, and do business in the state, strengthening its economy by increasing its competitive advantages while still effectively funding all public finance needs.

For a perfect example of a city that desperately needs the benefits of the LVT, one only needs to look to Philadelphia. Driving along almost any street, you'll see blocks of vacant lots and abandoned properties (including many older buildings with beautiful architecture) standing empty for a decade or longer. And while the city's historical infrastructure continues to decay, all around the outskirts large office and apartment complexes steadily expand. As a result, jobs and residents continue to abandon the city, preferring the terribly congested commute as sacrifice for other improvements in quality of life. The demand for living and working in the city still exists, but the taxes on properties, wages, and businesses make it increasingly uncompetitive with its growing suburbs. While the city's 10-year abatements have staved off a dramatic population drop, they are only a limited solution to a deep problem. It is ironic that the birthplace of Henry George, champion of land taxation, is one area that needs it most. By successfully enacting the LVT in Reading, we'll provide additional encouragement to the reformers working hard to get it passed in Philadelphia.[12]

So since such incredible results could be achieved by a simple shift in tax policy, how could the reform fail to pass here three years ago? Remember that no effort at tax reform seems to go easily. Allentown attempted to convert to the LVT over the course of 25 years, having the measure approved over seven times only to be vetoed by the mayor. For what happened in Reading there appear to be several factors, all of which have lessons that can be learned from for the next attempt.

The first major problem seemed to be a lack of information and education on the issue. This was evident both in the news editorials and from the statements of council members. The fundamental concept behind a LVT is incredibly simple, but the resulting changes are usually what make people skeptical or even suspect. Therefore, a stronger education effort must be made to address the concerns.

Additionally, the gradualism formula proposed turned a flat 10.3 mill[13] tax on both land and buildings into a 15.212 mill tax on land and an 8.24 mill tax on buildings, which lead to a

11 The OPT is now known as the Emergency and Municipal Services Tax.

12 For detailed information on how Philadelphia's tax system is harming its economy, check out the *Tax Structure Analysis Report* performed by the city controller's office in 2001.

13 A mill is a measure of the tax on property, equal to $1 of tax levied per $1,000 of assessed value, or 1/1000.

nominal expense difference to the taxpayer in the government's effort to remain revenue neutral (meaning that the government won't lose money during the conversion). It was argued that such a formula would result in little incentive to improve buildings, and the small price difference was hardly a good reason to develop idle properties. There are over 20 formulas and procedures for determining a good set of rates; by reviewing these for a better readjustment, we can still guarantee revenue neutrality, define a more clear difference between the tax split, and immediately spawn a large increase in building permits. Keep in mind that such a reform must be phased in incrementally, so as not to disrupt the funding of vital public services while the tax is shifted from buildings to land. Once property taxes are fully shifted onto land, the real estate market will become so efficient that no landowner in the city will be able to afford to keep their property empty or vacant.

Another major problem that occurred was that research done by the city auditor's office revealed that a majority of properties would see a tax increase under the plan. In addition, it was believed that owners of property with high-value buildings and improvements could be taxed significantly lower, while some properties with more modest buildings may see an increase. Such disparities seem immediately unfair, and there was some disagreement over the analysis. This isn't to say that such occurrences would be prevented from happening; remember that shifting value from buildings to land can result in tax rate changes, also. A parcel currently used for a home may be more profitable as a storefront or as apartments, especially downtown. Properties considered mansions may only be due to the investment in the building, not the location of the land, and most of these exist on the edges of the city. High-density buildings are also generally rewarded, too. In each case it is the market that is the determining factor. What's less fair is two neighbors living in similar homes, one paying a higher tax because their home is fixed up while the other gets away with lower taxes and a run-down property. Even still, a second look at the data is needed, as well as tweaking of the gradualism process to ensure maximum equity.

Other issues and concerns will certainly appear and will need to be properly addressed. For one, there will always be a natural contingent vehemently opposed to the reform, particularly because it would have an adverse effect on them personally or their constituency. This is often the case with owners of vacant or underutilized properties, as well as those operating undervalued properties such as ground-level parking lots. Their objections to a LVT often revolves around the perceived failure of Pittsburgh, housing issues for people with low and fixed incomes, loss of private property rights, assessment procedures, and zoning. All of these issues that will be brought up have been effectively addressed by each community's effort, but detailed responses will still need to be prepared.

Shifting the city's tax structure encourages rapid growth but is not an instant economic windfall. It is important to understand that a LVT is a long-term strategy for strengthening the tax base and facilitating further economic development. It must be implemented in conjunction with a comprehensive set of other economic reforms, like those included below in this paper. However, without it, any amount of other reform will only lead to a fractional and short-term improvement at best. For that reason it is presented as the first in our series of important economic reforms.

To move forward, the issue must again be brought to city council. Because it failed to pass before, a citizen-led ballot initiative may be necessary to put it back on the agenda. This will give the issue the time and public exposure necessary to regain momentum. Even in the uncertain face of a county reassessment, the LVT could be implemented now because although the building and property tax rates are levied equally, they are already assessed separately. The city is even prepared for such a move through the recent upgrade of its computer systems in anticipation of the tax. The LVT is too important to our future to ignore. Because of its significance, we'll explore these concepts further in several sections below, particularly in "Land Management."

In addition to taxing land, there are other potential government revenue streams that adhere to our new principles of taxation. **To further fund public services and move tax burdens off the factors of production, as well as continue a transition to more sustainable economic development, we should implement a shift to green taxes.** A "green tax shift" is a form of fiscal policy which lowers conventional taxes and raises taxes on consumption, particularly the unsustainable consumption of non-renewable resources. It is an obvious extension of land value taxation, since natural resources are considered part of the land and like land, are the common property of all people and through whom fees should be paid for their usage.

The Earth Rights Institute provides a great picture of how a green tax shift would change taxation. Cuts would be made to things considered true private property, such as wages and earned income, productive and sustainable capital, sales for basic necessities as well as homes and other buildings. Tax increases and "usage fees" would then be applied to land sites according to land value (essentially the land value tax); public lands used for timber, grazing, and mining; pollution into the air, water, and soil; ocean and freshwater resources; the electromagnetic spectrum (such as mobile phone and radio signals); satellite orbital zones; and oils and minerals. Additionally, socially and environmentally harmful, unnecessary, and inequitable public subsidies on areas such as non-renewable energy production, resource extraction, waste disposal, commerce and industry, agriculture and forestry, and weapons of mass destruction would be eliminated, challenging industry to meet society's needs in ways that enrich—not exploit—the World.

Green taxes could become an excellent source of revenue for county government, allowing it to reduce additional property tax burdens on municipal economies. It is better prepared to monitor resource usage (through the use of its GIS technology and public land management) and can more easily collect resulting revenues, as many natural resources span multiple municipal boundaries (such as rivers, lakes, and forests). Additionally, since taxes can be effective as a tool to shape communities' social, economic, and environmental systems, the county can craft tax policy in accordance with zoning and its comprehensive plan to coordinate and manage important areas of transportation, energy, waste management, and land use. There aren't many better ways to put Smart Growth principles into action.

The essential objective of a green tax shift is to create an economy based on more "true cost pricing and accounting," using fiscal policy to better integrate market-distorting negative externalities (harmful side-effects) and leads to higher efficiency in the means of production and more sustainable wealth creation. A comprehensive examination of these principles can be found in Redefining Progress's publication entitled *Tax Waste, Not Work*. Although it may seem like green taxes would place a strain on all forms of commerce, this need not be the case. There are more ecologically sound ways of producing and consuming in all areas of business, and a green tax shift coupled with investment incentives and a reduction in other forms of taxation (besides land) will make it more affordable. In the long run, most poor environmental practices are bad for the economy and only seem affordable now through large subsidies (water, fuel, agriculture, transit, waste, energy) and a lack of enforcement of existing laws. Because green taxes and ecological commerce open up a large realm of both business creation and environmental protection, we'll continue to explore this approach as well in Part III of the paper.

Local Businesses

In many ways, our businesses are the foundation not just of our economy, but of our community itself. They provide the goods and services necessary to our lives, the jobs that support our families, and the tax revenue to finance our public infrastructure and government services. These businesses come in many corporate forms, including privately and publicly held companies (including worker and customer owned cooperatives), government enterprises such as public authorities, and non-profits.

To be considered "community friendly" and worthy of our support, businesses should meet several important criteria. First, besides simply creating jobs, their goods and services should help to meet the community's needs. Secondly, they should employ responsible business practices, treating their workforce, customers, and the environment well. Thirdly, they should strive for efficiency; while a high rate of return isn't always necessary, any failing businesses are detrimental to the economy.[14] Lastly, they should have a strong sense of commitment to the community in addition to the bottom line.

All businesses, however, are not created equal. For-profits, non-profits, and authorities all have a certain level of distinction in their roles and ability to operate efficiently and responsibly. For-profits are often criticized for ignoring the best interests of the community and environment in their pursuit of profit (often by distant owners); authorities are often criticized for their inefficiency, political influences, and patronage practices; and non-profits are hit from both sides, told that to get better results they should either privatize completely or be operated as a government agency.

Since local businesses serve as our economic foundation, we need an effective business model that can address all of these concerns. As Michael Shuman details in his book *Going Local*, there may be a promising alternative. **The community corporation model, which combines the efficiency of for-profits with the protections of responsibility and local control, may be the most viable in serving our economy's needs.** Through slight modifications to the common corporate form, we can dramatically improve the community friendliness of businesses. Such a model would keep ownership of the firm and decision-making power securely in the hands of the community's citizens, but without the bureaucracy and public expense often associated with government operations. And even if the business' mission statement seeks to address fundamental community issues responsibly like a non-profit, it could operate with the efficiency, accountability, and financing options available to for-profits. Also, it could help to bridge the divide between those who believe in community interests and social justice and those who support limited government and a market economy. It could quite possibly be the best description of what a truly "local" business should be.

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14 Not only should we help keep our businesses operating, but work to keep them here in the city. To a community, a business with a low profit margin that stays rooted is more valuable than one that packs up in search of higher profits elsewhere.

So what makes a community corporation different from other forms of businesses, such as sole proprietorships, partnerships, and conventional corporations? First of all, they share the same benefits of traditional corporate entities, particularly in the areas of limited liability, perpetuity, and finance options, all things generally not available to sole proprietorships and most partnerships. While there are many strong arguments related to such benefits for many small businesses like these to merge or convert into corporate form, we won't get into them here. The key distinction of community corporations is in the management of stock, which can also be loosely applied to other share-divided business forms such as partnerships.

While the firm's shareholders would still decide how the business is operated by electing members of the board of directors, only members of the community could own voting shares of stock, which could be freely exchanged or sold among themselves. Should someone move out of the community, they would be obligated to sell their holdings either to other residents or back to the corporation. These restrictions on stock transfer or sale rights can be laid out in the articles of incorporation or through an agreement with or among shareholders. Such restrictions should remain lawful as long as they are clearly expressed as being in the best interest of the business.

There are additional modifications and limitations that could be placed on stockholders that are attractive in creating community corporations. By creating two classes of shareholders, one with a residency requirement and voting rights and one without either, control could remain in the community while outside investment could help finance business expansion. This configuration is similar to the relationship between the conventional forms of "common" and "preferred" stock, although additional changes to the rights to dividends, liquidation proceeds, and redemption privileges may need to be made. Another limitation might be on the percentage of stock that one person could hold. This could help prevent a single individual or a small group of shareholders from relocating or dissolving the company without broader community support. Since all of the voting shareholders would be living in the same community, it would be unlikely for the firm to move somewhere else, but the added obstacle would further safeguard against mobility.

While shareholder restrictions and local ownership of a corporation do not guarantee that the firm will automatically meet the community friendliness criteria specified above, it effectively improves the likelihood that it will. By establishing community corporations, there's a much better chance that the enterprise will be set up to meet local needs while still operating as efficiently as possible. Because shareholders would live in the same neighborhoods with both their workers and customers, participate in the same local economy, and rely on the same natural resources and infrastructure, they'd have a greater incentive to make decisions that are responsive to their neighbors' needs and keep their support. And if the company began to veer off track, besides having the power to take their business elsewhere (or even set up a new one), other community members could buy out the stock, take over the firm, and redirect it.

So how can we incorporate the community corporation model into Reading's economic redevelopment strategy? Two obvious objectives of this strategy must be to (1) retain and sustain existing businesses, and (2) create and nurture new businesses, and in both cases community corporations could play a pivotal role. **To facilitate in achieving these objectives, powerful incentives to convert into or create community corporations could be offered.** Such a package could include exclusive offerings of tax breaks, financing options, purchasing contracts, and other premium services typically used to attract outside firms.

This strategy is fundamental to strengthening our economic self-reliance. Instead of trying to attract foreign firms, let's use these finance tools on home-grown businesses that are already established here in the city. Some cities offer large companies like automakers huge incentives to set up shop upon seeing the promise of new job creation. When these multi-million dollar financing packages are divided by the number of jobs expected, the amount spent by the city for each job often tops $100,000 dollars. In many of these cases, the company might take the bait, stay for a few years and suddenly decide to relocate in pursuit of an even better deal elsewhere, leaving the original city with the burdens of mobility and a large revenue shortfall.

Now imagine instead if this same amount of money was split up among a dozen local businesses, enabling each to expand their operation, hire or train more workers, increase production output, and enter new markets. Such a move makes greater sense for several reasons, as small businesses are still the backbone of job creation in our country, are less likely to uproot, and are more likely to keep those investment dollars circulating in the local economy. Additionally, there's a better chance that the city will see a return on such an investment by spreading it out among a diversified portfolio of companies.

The bottom line is that we need to stop investing in businesses without asking for anything in return. By only offering these incentives to community corporations, and removing them from firms unwilling to make such a commitment, some firms would inevitably uproot. More positively, the process of moving toward community self-reliance itself will identify many unmet local needs. **To prepare for this, we need to create an economic environment where new business opportunities can be quickly identified and captured, using an extensive network of public/private partnerships to effectively coordinate entrepreneur recruitment/training and business incubation.** Such an entrepreneurial climate will ensure that community needs can be better met locally and that holes in the economy left by mobile corporations will be filled quickly.

In fact, the necessary resources and organizations are already in place and such an effort is underway. The city's Department of Community Economic Development, the Chamber of Commerce and other groups such as the Berks Economic Partnership have been instrumental in exploring and implementing new business and job creation projects in the city and county. Potential entrepreneurs have excellent free and low-cost business training and consultation resources at their disposal through opportunities such as the Reading Area Community College and the Reading chapter of Service Corps of Retired Executives (SCORE). Small business creation incentive packages could be tied to successful completion of a business degree or certification program and on-going work with SCORE to ensure a sound business plan and management skills are in place.

Finally, there are a large number of empty commercial properties in the city, ranging from industrial parks to neighborhood shops, ready to be converted into business incubators. The Reading Outlet Center and Reading Station would make excellent sites to provide low cost leases, marketing opportunities, and other assistance to small businesses offering local goods and services as a fully-functional "buy local" marketplace. This would also be an excellent location to create a range of new social and entertainment establishments, including restaurants, coffee shops, art galleries, and night clubs to serve the Northeast section of the city (including Albright college) within walking distance. This would be a perfect way to keep these buildings on the tax-rolls and off the auction block, as the current hope to revive them to their former retail prominence may never happen. To round off the idea, such an enterprise should be owned and operated by a local economic development corporation to insure that it is run in the best interest of the local economy and community, not a bank in Texas or investor in New Jersey.

The latest effort to try and tie many of these things together is being led by a dedicated coalition of business and community leaders called the Initiative for a Competitive Greater Reading (ICGR). With the assistance of the Initiative for a Competitive Inner City, a national non-profit that seeks to strengthen inner-city economies, the ICGR is working on identifying and developing several economic "clusters" in markets and industries believed to be natural strengths for the Greater Reading area. A cluster is essentially a group of related but loosely-coupled businesses that work together (and often compete with each other) to produce goods and services in a particular area. Hollywood is a good example of clustering at work, where actors, writers, studios, production companies, and smaller, more specialized media companies work together to create movies. The key clusters identified by the ICGR include "Professional and Shared Services," "Entertainment, Hospitality, and Tourism," and "Food Processing." We'll take a closer look at the concept of clusters and some other business development possibilities below.

The ICGR is one group that deserves strong support, as its efforts bring much-needed energy, dialog, and leadership to the difficult process of rebuilding our regional economy. At the same time, there are some serious concerns with what is being promoted as their plan. In the material they've produced thus far, there seems to be no language expressing the need for economic self-reliance or environmental sustainability. Instead, they state in their final report that "[t]he need to compete globally is the most important element of the future success of the Greater Reading region," and that our ability to "present ourselves to the world around us [to attract new businesses] needs to be as good as or better than our competitors who have been at it for some time." Taking this kind of approach will only continue to destabilize our economy by further exposing our community to the four threats of global economic dependency described above.

It is important to emphasize that self-reliance and sustainability are not incompatible with economic development, and the ideas put forth in this paper do not seek to undermine the ICGR's hard work. Although fundamentally different in their approaches, the two strategies share the same vision and seek to provide solutions to many of the same problems. In moving forward, it is hoped that the ICGR will take a serious interest in the ideas presented in this paper and possibly incorporate them into their overall agenda.

Local Production

Besides attempting to create jobs by attracting outside businesses (often at any cost), our growing reliance on imported goods also makes us increasingly vulnerable to the volatile dynamics of the global economy. This is especially true of those things deemed essential for our basic survival, such as food, water, clothing, building supplies, medical treatment, and vital social services, but also extends into the inputs (raw materials) necessary for our primary industries. And besides being held captive to the nature of national and international supply chains, such a dependency also deprives our community of the many economic benefits of producing our own necessities. **To reverse this trend and increase our economic stability, we should strive to reduce our dependency on foreign goods and instead produce locally for local needs.**

This approach, called import replacement (or import substitution), is the process of identifying external dependencies in all areas of economic activity and creating ways to provide those goods and services locally. This means, for example, reducing our dependency on fossil fuels by using renewable, locally available or producible energy sources such as solar power and biofuels, and consuming food produced and processed by local farmers and food companies. We'll take a closer look at ways to address these changes in Part III.

In addition to stabilizing the economy, local production through community corporations can be a powerful engine of business development and job creation. **Since self-reliance means ensuring that enough of the community's basic necessities can be met locally, and serving the needs of the community is a necessary criteria of a business' community friendliness, community corporations are the perfect market-based approach to drive production efforts.** Import dependencies can be effectively tracked through methods such as sustainability indicators, trade association studies, import pattern analysis, voluntary resource usage surveys, goal-driven import reduction effort results, and even information collected as part of businesses' annual reports. This data, once compiled and made available to the community, could provide the information necessary for local entrepreneurs to identify new import replacement opportunities and create business opportunities around them.

The process of import replacement through goods and services produced by community corporations should result in strongly positive multipliers being created from such activity. Even by simply focusing on the bare necessities for substitution, we'll see new wealth creation, an expansion of the tax base, more and better jobs, stronger families and neighborhoods, and improvements to public services and infrastructure. And while it might be sufficient to even stop once we've addressed all of our basic needs, the goal should be to keep going. As each import is replaced, a stronger and more experienced network of entrepreneurs, workers, and public officials will be able to work together to begin providing local solutions to less-essential community needs as well, further reducing economic dependencies.

While it isn't realistic to expect Reading to produce automobiles or computers any time soon, there are many possibilities for future import replacement efforts. The best starting point would probably be the inputs needed by our primary industries, such as agriculture and manufacturing. The more raw materials that can be locally produced, the more basic inputs can be manufactured into more complex inputs for other production processes. Through such local manufacturing chains, complicated final goods and services can be provided through retail and distribution channels that we normally rely on from outside the community. These locally produced goods could remain competitively priced thanks to cost savings in the areas of technology, packaging, storage, marketing, middlemen, and distribution.

To coordinate local production, the ICGR's excellent approach advocating the use of clusters should be implemented, although the goal should be to provide as diverse a range of import replacing goods and services as possible, instead of focusing on attracting outside businesses and competing globally. Limiting import targets or depending on specialized and target markets for economic development can create unnecessary vulnerabilities and set a community up for eventual obsoletion or failure. This is one reason why economic development in many developing nations fails.

Clusters, which are essentially dynamic production networks, should be used to provide economy of scale solutions such as those mentioned above. Such networks of small businesses typically form to produce large-scale products, and when development and production of such a product isn't needed or profitable enough anymore, the network simply disbands. This could help keep the region flexible and resilient to market changes while still enabling solutions normally reserved for large companies to be provided both competitively and locally. Such a configuration is more possible today than ever before due to advances in technology and production techniques, and we should strive to utilize these new developments as much as possible. The Manufacturing Association of Berks County could perhaps coordinate these efforts.

This strategy shouldn't be limited to manufacturing, either. Communities across the country are increasingly becoming service and knowledge economies, and this paradigm shift offers many opportunities for community enterprise. Whether the service is training, consultation, engineering, or repairs, with the right people and technology even the smallest communities can compete with global businesses. This is why it is critical to develop a highly educated and technically adept labor force. In today's impersonal and outsourced business environment, there is also increasing value in dealing with companies more fine-tuned and responsive to local needs.

It must be emphasized that this strategy is not a form of protectionism and doesn't advocate any sort of tariff on foreign goods.[15] Such an effort would be ridiculous to try and enforce on a community scale and does little to change people's minds about production and consumption. By instead providing incentives and market support for import replacement by community corporations, as well as discouraging those who choose not to support the community's efforts of economic stabilization, the concepts of self-reliance and community economics may more easily become institutionalized.

Such an arrangement would still permit imports and exports, however they wouldn't be critical to the health of the local economy and satisfy wants instead of needs. Diverse imports play an critical role in an increasingly diverse community, and are an important contributor to culture sharing. Additionally, there may be many valuable export-driven markets for the community to continue contributing to, perhaps working with community corporations in other communities as networked clusters to address larger economies of scale. The ultimate goal of import replacement is not to limit options, but to minimize harmful dependencies and allow us to accomplish more in our own backyard.

Local Purchasing

Local production by local businesses can only occur if we make a commitment to support this effort through our purchasing decisions. The more we purchase from local producers, the more they will be able to produce, often at a price competitive with external offerings. And with sustained customer support, community corporations will be more likely to expand their offerings and bring more locally produced goods and services to the marketplace. Over time, it should be possible to have almost all our basic needs met through this community effort.

15 True free trade—especially among nations—is essential for global social, economic, and environmental development, but much work is needed to create such a fair and equal system of trade. For the "big picture" on this topic, see *Economic Democracy* by J. W. Smith.

To help promote local purchasing, the community should develop an aggressive "buy local" marketing campaign that includes advertising, store signs, and certification labels for product packages and service provider stationary. This would be a great project to get the Chamber of Commerce, the Berks Economic Partnership, the Department of Community Economic Development, and other leaders in the businesses community together to spearhead (using local marketing firms and suppliers, of course). Besides promotion, they could work to bring local input and output producers together to coordinate new production opportunities. Annual awards could be given to organizations that pass certain threshold levels of local purchases for their budget expenditures, as well as to those that shift their focus to providing more locally produced goods and services to meet local needs. The city government should lead this effort in its purchasing and contract choices, making a preference to local businesses that meet important labor and environmental standards.

Besides simply affecting the fundamental laws of supply and demand, this effort also produces another major positive multiplier. By purchasing locally produced goods and services from local businesses, consumers can keep the money they spend circulating within the community longer. To make local purchasing both easier and more effective, we'll need to rethink the role and design of money and the monetary system it is used within.

Money is the lifeblood of society, and must continuously circulate throughout our community in the same way blood carries nutrients and oxygen to all the vital organs that make up our bodies. Each person, family, and even neighborhood needs a certain amount of money to provide for basic needs. Should the flow of money be reduced or cut off, part of our community begins to die, forcing people to move away, seek public assistance, turn to crime, or even give up. Such breakdowns gradually spread and cause further deterioration of the entire system. A healthy community economy should therefore seek to keep as much money properly circulating internally as possible.

The main source of money in the community comes from business revenue and workers' incomes. When this money is spent locally, it helps local businesses provide more goods and services. As these businesses continue to expand, they will also be able to create more jobs and increase the city's tax base. With a better tax base, the city will be able to provide better police protection, street lighting, and other services to make our neighborhoods safer. This will make people more willing to live, work, and shop in the city, further increasing the tax base and revenue streams for local businesses. Though highly simplified, this is an excellent example of an economic multiplier in action.

Unfortunately however, this isn't always the case. Often times, due to convenience, lower prices, or lack of local offerings, we spend a majority of our money on goods and services provided by commercial establishments with little connection to the community, such as "big box" retail stores and chain restaurants. While we may see immediate value in these businesses, they often create what's called a "false economy," negating the effect of their value through indirect damage to the local economy over time. Besides homogenizing our purchasing options and reducing the uniqueness of our local economy to the lowest common denominator, this type of purchasing causes a large majority of the money spent to immediately leave town, robbing us of the economic multiplier made possible by each dollar we spend. This causes the quality and number of local businesses to decline, and forces us to depend mainly on and make concessions to the non-local companies for goods, services, jobs, and tax revenues. On top of this, the risk and effects of corporate mobility and global economics become ever-present, and should enough key businesses leave, the local economy could suffer major damage that's difficult to ever fully recover from.

Besides circulation, there are other key problems with our current monetary system. Money is typically believed by most people to serve two roles: (1) as a medium of exchange and (2) as a store of value. The problem with this view however, is that the two roles directly conflict with each other. As a medium of exchange, it should constantly trade hands through transactions for goods and services, labor, or rent. As a store of value—namely investments—it should instead be held in interest-yielding accounts. These two diametrically opposed roles cause money to be misallocated, being saved when it should be spent and vice versa. In an ideal system, money should remain a medium of exchange, and value should be stored in more proper mediums, such as stocks, bonds, or other assets. We'll discuss the role of finance and investments more below.

Additionally, there are problems with the way money itself is created. Although it is something we use every day, few people understand the way money is made. Even if the money in a community is received from business income, it must originate somewhere else. Instead of growing on trees, it's instead created by banks (not the government) who issue it to individuals and businesses through loans, credit cards, and other types of debt. This loaned money is then spent into circulation, where it eventually ends up in your hands. Not just anyone can borrow money any time they need it, however. It is kept artificially scarce through an increasingly centralized and undemocratic decision process by the private banking cartel—headed by the Federal Reserve—who openly admit to this goal.[16]

The main reason there is never enough money to go around is because of the interest and asset claims forced onto debtors by lending institutions. Loans on items such as cars, houses, or other large consumer purchases ultimately require a substantially larger amount of money to be paid back than was originally borrowed, placing all debtors in an impossible situation of always owing more money than is in existence, as the principle amount on loans is withdrawn from circulation as it's paid back. This in turn creates a debt imperative for growth where constant borrowing must be done to pay for ever-rising debt, and as required by the design of the system, some must always lose by defaulting on their loans.

This also creates another major problem. Because money is essentially an information system that accounts for IOUs, there is no inherent value in it at all, and it exists only as paper in a wallet and numbers in a ledger book. Value instead derives from the usefulness of the currency in purchasing desired goods and services in the marketplace. These are the real sources of wealth, and can only be created through human labor applied to capital and the natural opportunities of land. When money is issued (by extending debt) to purchase goods and services, it temporarily creates more money in the marketplace without creating or replacing the equivalent amount of real wealth.

While this might be acceptable if the borrowed money is used to produce more goods and services, there are many instances where it is improperly issued.[17] This includes speculation (on land, real estate, stocks, etc.) and consumer credit, all of which generally take wealth from the

16 There are strong arguments that Congress unconstitutionally gave the Federal Reserve this power.

market without returning an equivalent amount. The biggest culprits are actually governments, who often finance huge budget expenditures with debt and return little real wealth to the market. With more money available to buy less useful things, the "spending power" of each dollar is decreased, and forces sellers to charge more for the same things as before. This is, in a nutshell, the major cause of inflation; it comes not simply from too much money being available, but from the misallocation of its issue in relation to the production of real wealth (or more simply, too much money chasing too little goods and services). While the Fed attempts to address inflation through interest rate adjustments, its banking policies themselves allow the misallocation of money and the resulting inflation. Even if rate increases can slow the rise, inflation ultimately increases, causing prices to always seem more than they were years ago.

So what can a community do in the face of huge monetary challenges such as distribution, scarcity, interest, and inflation? The answer may be simpler than you think. **To help protect against the instabilities and inadequacies of the national currency and keep more money circulating within the community a form of local money, called community currency, should be created and used as much as possible.** Such an effort will open our economy up to a whole world of new possibilities.

What we think of as our modern monetary system is just that, having been created less than a century ago. Before then, no unified currency existed and trade was conducted using local forms of money or by bartering. Some commodities, such as tobacco, salt, grain, and cattle were also commonly used as cash. The standard monetary unit of the dollar was actually adopted from a Spanish coin already in circulation during the Colonial period.

There isn't much special about what we now consider "normal" money either, which is a combination of bank credit created by loans and the "cash" it represents in the form of Federal Reserve banks notes and U.S. Treasury coins. As we saw above, it isn't fully backed by the real wealth of goods and services, or even gold and silver as it once was. Instead, money is said to be backed by partial wealth and "the full faith and credit" of the federal government, which isn't directly responsible for the creation of real wealth.[18]

So what makes community currency different—or even better—than the national currency? First, it truly is a "local" form of money. Call it Berks Bucks, Pagoda Dollars, or whatever else, a community currency can only be spent within the community that creates it. This addresses the issue of money constantly leaving the community to be circulated elsewhere, and promotes purchasing locally through its design. The scope or size this community should be is up for debate, but it is recommended to begin at a manageable level; the Greater Reading area provides a wide enough variety of goods and services to make accepting and offering the local currency attractive, but the ultimate boundaries of the system should be restricted from extending outside the county line.

17 Capital investments, while possible to create from loans, should ideally be received from existing wealth, as even borrowing for production causes inflation to rise.

18 There are some physical wealth reserves held by the U.S. government, such as the gold stored in the Fort Knox Bullion Depository and several other U.S. Mint reserves. However, the total amount of wealth represented by all money in circulation cannot be redeemed by these reserves, thus we operate under what is called fractional-reserve banking. There are also many problems with backing a currency with materials such as gold instead of actual marketplace goods and services.

Second, it enables the community to supplement the constant shortage of money (and the many problems created by this shortage) by allowing those in need of it to create it. To do this, a community currency is set up as a mutual credit system: to conduct a transaction, the buyer's account is debited and the seller's account is credited for the price of the goods or service. What makes this different from normal credit transfers is that everyone's account starts at zero, so debt is a necessary and healthy part of circulation. To prevent too much debt from occurring, reasonable limits are placed on debt which can be extended over time with regular positive credit payments (just like credit cards). To help discourage excessive debt and protect against defaults and fraud, the system is quite transparent and credit ratings can be checked by sellers.

All this reverts money to its original role as an information system of economic exchange—a registry of IOUs, so to speak. No interest is charged on debts, so using money itself isn't expensive as it is with official money. Additionally, it is created as needed and backed by real wealth in the form of the goods and services created by the land, labor, and capital of the community. This proper issuing of money will reduce local contributions to the steady rise of inflation.

Fundamentally, relying on "imports" of money itself from outside the community and through conventional debt is just if not more destructive than other necessities. The more goods and services produced using local resources and the more people offer and accept payments in the community currency, the healthier our local economy will become. Doing so will also create a sort of "safe harbor" against the unpredictable seas of global economic forces that surround us.

Besides these fundamental differences community currency still functions just like national money, and as a supplementary system can easily coexist within our conventional monetary system. Like regular money, it can come in many forms, such as ledger credit, cash, checks, and smart cards, and should be accepted as payment for goods, services, labor, rent, and even local taxes. Since both buyers and sellers still heavily rely on external costs that require the use of national currency, even partial payment in the local currency should be encouraged as much as possible. After time and as more goods and services are offered through local production methods, its possible that a majority of transactions could be conducted using mainly local money.

In the very beginning, community currency could be offered for relatively simple economic exchanges, such as yard sales or paying a neighbor for their labor from minor home repair. Small jobs usually done by youth such as baby-sitting or shoveling snow are also good examples. Even some work usually done as volunteerism could be rewarded through local money. This isn't to reduce the importance of volunteering, but to encourage economic exchange and the circulation of the new money. Donating to charity is also another good opportunity; the wage you received from a neighbor for helping them could serve as offering at your house of worship, who would perhaps use the money to hire someone else to patch their roof or tend the garden, and so on. Do you notice the economic multiplier "rippling effect" yet?

However, to fully receive the many benefits of a local money system, an organized effort must be formed. This organization, which could be called the Greater Reading Economic Exchange Network (GREEN), would be charged with the tasks of designing, implementing, and operating a community currency system within our local economy. Operating similar to a bank, this new financial institution's responsibilities would include the technical development of the system, including the computerized registry, physical means of exchange (tokens, paper bills, checks, smart cards, etc.), and the policies and procedures governing usage; daily account management, credit clearing, and customer service; and of course, promotion.

One of the most important components for GREEN to develop would be a Web-based directory of goods and services offered or requested that support the use of the local currency, having the features of both the "yellow pages" and "classified ads." It should also include an "online banking" interface to allow account holders to access their accounts, electronically transfer funds to other users, and lookup credit ratings before carrying out transactions. Besides the Web system, a hardcopy edition of the directory and ads could be printed regularly or on demand and distributed (perhaps as part of the newspaper). The goal should be to make it as easy as possible to locate and purchase a diverse supply of goods and services with local money. Regarding promotion, GREEN could offer the "next step" in the "buy local" campaign by developing certifications, reviews, labels, and awards for those individuals, businesses, and other organizations that actively participate in the community currency system.

To get started, GREEN might go after businesses and organizations that suffer from long periods of low patronage, such as public transit, art and cultural institutions, restaurants, recreational facilities, and farmers' markets. Every day buses do their routes, museums host exhibits, theaters display movies or performances, restaurants prepare their meals, newspapers are printed, and farmers market their crops. Fewer customers means wasted goods and services, job cutbacks, weakening tax base, and business closings, even though the need for all these goods and services is always present. Because community currency can be created as needed for these goods and services, those with limited economic means (unemployed, fixed, or low income) can better meet their needs and increase these establishments' regular patronage.

In each case, as long as external overhead costs (sales taxes, imports) are met through partial payments of national money, accepting local currency appears as an attractive purchasing incentive—similar to discounts, coupons, or other special offers—that could help boost sales and attendance and further economic development. And once this money is in circulation, it will continue to pass hands for the production and consumption of new goods and services, creating new wealth, jobs, and tax revenue and adding millions of dollars of transactions to the local economy. Utilizing the dynamics of local money and markets, Reading could become a city where everyone can meet their basic needs, improving the quality of life for all residents.

And above all, GREEN should be operated locally, democratically, and transparently. Essentially becoming the local equivalent of the Federal Reserve, it is critical that GREEN always serves the best interest of the community and the local economy. This requirement should be reflected in the structure and composition of the organization, and will help move more monetary decisions from the back rooms to the public square. Since it must run efficiently and keep costs down, while still remaining anchored to the community, a community corporation would probably be the best organizational form. At the same time, there are valid concerns about for-profits in the business of producing money, so these issues must be carefully weighed.

Local Labor

The limits as to what a community can achieve are determined largely by the abilities of its inhabitants. To fix the problems of the past and prepare for the challenges of the future, we need to reinvest heavily in and provide better opportunities for our most precious resource: our people. While the expansion of democracy will play a pivotal role, economic empowerment will be just as important. Perhaps more than anything else, a large and prosperous middle-class is essential to the city's long-term success.

One of the most urgent issues facing many people in our community is poverty. It is a well-known fact that inner-cities are the most impoverished areas in the country, and Reading is no different. Based on figures from the 2004 Berks County Data Book, our city suffers the lowest per-capita income, median family income, and median household income levels in the entire county. And with the median levels often being two or three times lower then the levels of surrounding communities, it's not hard to imagine the quality of life for the almost 25% living below the poverty line (including many children and elders). In 2004, the Berks Coalition to End Homelessness counted almost 500 homeless people living in local shelters, abandoned homes, and on the street.

Besides those directly affected, these conditions cause the whole community to suffer, too. There is a clear connection between poverty and the social pathologies of crime, violence, homelessness, drug use, mental illness, family conflict, and other problems crippling our city. To eliminate these problems, we need to work to eliminate poverty. And far from impossible, it is a challenge that we can succeed in if we choose to commit to it.

The most obvious step is to create more and better quality jobs. By instituting the other reforms presented in this document, we'll be best prepared to address our economic challenges. But there are more direct approaches we can take to eliminate the terrible income disparity. **As a first step, we should encourage support for a living wage, which establishes what income is necessary to meet basic human needs in a community.**

A living wage is similar to the federal minimum wage, in that it sets a "floor" for what should be paid for an hour of non-exempt (non-salaried) labor. Almost everyone agrees that anyone who puts in an honest week's work of 40 hours deserves to be able to afford basic human needs such as a roof over their head, clothes on their back, and food on their table. Unlike the federal minimum wage, the living wage truly recognizes the different conditions that exist in each community; the current minimum wage of $5.15 will be worth more or less depending on where you live. The actual wage is based on a formula that utilizes two guidelines: (1) no more than 30% of monthly income should be spent on housing, and (2) the annual fair market value of a local one (or two, for families) bedroom apartment (plus utilities), which is established by the U.S. Department of Housing and Urban Development (HUD). For Reading, based on a monthly market value rental cost of $498, the living wage would be $9.58 an hour, determined by the following formula:

	$498.00	1 month's rent for a one-bedroom apt.
$498 ÷ .3 =	**$1,660.00**	Necessary monthly income to make rent
$1660/month × 12 months =	**$19,920.00**	Annual income
40 (hours) × 52 (weeks) =	**2080**	Work hours in one year
$19,920 ÷ 2080 hours =	**$9.58**	Living wage (rounded to nearest whole cent)

Table 1: Living Wage Formula

The important thing to note about the living wage formula is that it is based upon the actual economic conditions of the area where the person lives (and typically works), whereas the federal wage is fixed across the country and its effectiveness varies from place to place. The living wage formula produces a fair policy that takes the needs of both businesses and workers into account, tying the cost of living to local housing markets. In contrast, if the national living wage was based on housing costs in Santa Cruz, California, businesses would need to pay out $28.37 an hour, quickly killing most of the jobs and ruining the economy nationwide.[19]

There are other major differences between the two labor standards as well. Ironically, in many ways the federal minimum wage is a failure to those in poverty. Established as part of the Fair Labor Standards Act in 1938 its original goal was to protect workers from exploitation, with Congress deeming that poor labor standards had an adverse effect on the economy. Since that time, the amount determined for the wage has increased fairly consistently along with the cost of living. Around the end of the 1970's however, the cost of living began to outpace the rate of wage hikes, meaning that an hour's work today will only be worth around 75% of what is was 25 years ago.

So why hasn't the minimum wage rate stayed consistent with the cost of living? In the beginning, the minimum wage was based on indicators such as the federal poverty line, which itself was based on three times the cost of food for a year. Even the formula determined to calculate food costs, the U.S.D.A.'s Economy Food Plan, was admittedly known not to be a reasonable measure of basic money needs for a good diet. Since then, the cost of food has continued to slide towards the modern cost of around a sixth of a low-wage worker's monthly budget. Because of this, the primary index of the cost of living is based on outdated family consumption patterns and is no longer accurate.

There are also several more modern factors that have contributed to this downward slide. The biggest contributor has been the constant rise of inflation, as we discussed briefly above. If the real value of a dollar had remained constant over the past few decades, there would be no need for constant wage increases because more could be done with less money. Besides wage earners, inflation creates an ever-tightening squeeze on people who live on fixed incomes, such as seniors and people with disabilities. Even though the federal poverty line is periodically adjusted for inflation, the federal minimum wage isn't indexed to it, still being based on its flawed consumption formula.

19 This isn't to say that there aren't problems with incredibly inflated housing markets, such as those in California and other areas of the country. For this problem, other economic reforms such as the land value tax could help bring back down the cost of housing.

In fact, the minimum wage isn't indexed to anything today. Instead, it is set by our members of Congress and is dependent mainly on the political and economic climate on Capitol Hill at any given time. While several dedicated members attempt to propose new legislation every year that would provide a new wage hike, most congresspeople are unmotivated even by the highest level of poverty in the country waiting right outside their doors, much less by those suffering across the country. Although the states can also institute minimum wage levels, the same political obstacles still exist. Some say we should simply take the issue out of their hands, and index the minimum wage to the (annually automatic, for Congress) cost of living raise our leaders give themselves.

To be sure, there are many concerns about instituting a living wage. A common response to this reform is that we cannot afford it. But can we truly afford to continue the steady expansion of poverty and its effects? At the moment, crime is arguably the biggest drain on our community's resources. Nationally, more money is spend on prisons and crime fighting than the amount invested in our children's education. On top of this are the costs to the community, where homeowners move away, businesses close down, and families are torn apart from the violence. Additionally, a large bureaucracy exists that is funded primarily from tax money to provide food stamps, housing, medical treatment, and other vital social services to those in need. Would it not be better to strengthen the labor market's ability to allow more people to provide for their own needs, rebuilding their dignity and freeing them from a "client" mentality?

But will a living wage inadvertently hurt our economy and businesses by reducing jobs (or at least hours) and increasing prices? Arbitrary (not market-based) wage increases will always reduce jobs and unskilled workers' entry into the job force as well as increase prices and inflation. To be honest, a living wage effort doesn't address the fundamental causes of poverty and cannot effectively undo them; it is a reform driven instead by a moral and political imperative to reduce economic inequities. By themselves, higher wages for the poor would be readily absorbed by increases in rent and the cost of goods and services, and might even reduce the number of jobs available to them. Besides, there is another powerful force driving down wages: globalization. The growing industrialization of developing countries and the free reign of mobile corporations has created a race to the bottom that no job is safe from. What started out closing down textile and manufacturing plants has extended into advanced technology, office work, and medical care. Unfortunately, there isn't much that can be done to stop poverty in our communities through wage policies alone; this is why local self-reliance must be at the heart of our economic reform efforts.

The argument for or against a legal wage floor is beyond the scope of this paper, but certainly is an important topic for communities to educate themselves about. More interesting—and perhaps effective—solutions for addressing poverty exist, such as the Citizens' Dividend, which essentially provides a form of guaranteed income for all citizens based on government surpluses from land taxation, green taxes, and user fees (an idea strongly support by Dr. Martin Luther King, Jr.).[20] Additionally, other significant reforms are needed in the areas of taxation (earned

20 Such a system could become an effective funding source for (or alternative to) Social Security, as the current method of taxing income is ultimately detrimental to wages. Alaska has a state program similar to a Citizens' Dividend in that all state residents receive an annual check from the government, who collects royalties from oil-drilling companies on public soil.

income/sales vs. land/resources) and the monetary system itself (issuing, interest, and inflation), both root causes of poverty.

All this isn't to say that we shouldn't seek better wages for our people in the meanwhile; if a minimum wage is going to exist, it should at least be more fair. By getting rid of local business and wage taxes and the provision of other incentives, as well as general support of local businesses, the cost of wage increases should be able to be offset while more permanent reforms are pushed. Indeed, better wages for our poorest wage earners will help businesses and the local economy. Because low-income consumers are most likely to turn around and spend their wages on daily purchases, this wage increase will quickly turn around into a large stimulus for the local economy. High-wage earners—especially the rising ranks of millionaires—often end up hurting the economy most. It's not necessarily bad that they earn more money, it's that they often sit on it (reducing the amount of money in circulation) because they have no need for further purchases or because they fail to invest these surpluses effectively (and locally), which would allow others to employ the assets as capital for further production and job creation. We'll take a look at effective community investment options below.

If more local businesses could provide for the needs of low-income workers, such a cash infusion into the economy would only provide more opportunities for business expansion and local production. **To address some of the fundamental problems of conventional wage hikes and ensure the additional wages stay in the local economy, perhaps the percentage of increase needed to meet the living wage could be paid using the community currency.** Besides improving wages, such a strategy would do two important things. First, because it would regularly put local money into people's hands through their paychecks, businesses would be more receptive of accepting it. This has the obvious benefits of a local economic multiplier. Secondly, because the companies issuing wages in the local currency would need to replenish this account to make payroll, they too would have more incentive to do business with customers or other companies that deal in local money. Because it is critical that a wide variety of goods and services are offered by supporting businesses in a local money system, this cycle has the potential to address that challenge and improve wages at the same time.

The municipal government can take an important lead in the efforts to establish a living wage. First, it could pass an ordinance requiring businesses seeking government contracts to meet the living wage and high-quality labor and environmental standards. This could relieve some of the tension between unionized municipal employees and efforts to cut costs through privatization. Second, it should accept community currency as payment for taxes, fees, and services. To begin with, a certain percentage of local money could be accepted, to make sure enough official currency is on hand to pay for external costs not readily available in the local economy and outstanding debt balances. Third, it should begin using the local money collected to offer living wages to its employees and for budget expenditures for goods and services when possible. This should provide the initial stimulus necessary to help both community currency circulation and a move towards living wages within local businesses.

Connected to the widening income disparity, another challenge facing our people is the availability of quality and affordable health care. Across the U.S., there are over 45 million people without coverage, including 8 million children. In Pennsylvania alone, the number of uninsured is 8%, most of which are young adults and minorities. And far from being an avoidable expense, injuries and illnesses can often escalate into matters of life and death, with medical costs so high they force the loss of what little wealth the uninsured have accumulated until then. Many families must declare bankruptcy and lose their homes over high medical bills.

This isn't just an issue facing the poor and unemployed, either. Of those uninsured here in the state, roughly 70% work a full-time job and still cannot receive benefits. Additionally, many small business owners that currently pay for coverage out of pocket are struggling to keep up with premium increases, which can cost close to $1,000 a month for just them and their families. Even workers covered through employer-provided plans are seeing their co-pays and deductibles increased, and/or are having their benefits scaled back entirely. It's rapidly becoming an issue we all must face, whether now or in the future.

Because of its scale, the problem of health care has continued to remain a hot button issue on Capitol Hill. Generally reemerging during election cycles, the interests of workers are unnecessarily pitted against those of business owners, and debate ensues between the roles of the public and private sectors. It is a classic economic challenge in resource distribution, efficiency, and equity that no one can seem to properly address. By looking at both sides of the issue, it's not hard to see why.

Fundamentally, health insurance is just like all other forms of insurance: a system of risk cost-spreading. Unlike spending money for things we want, unnecessary health costs are undesirable, so people generally seek to avoid injury or illness. But since we all run the risk of getting hurt, sick, or developing various disorders, pooling resources and having individuals draw from this when necessary is the logical approach. Even though you may contribute a predictable amount regularly to the pool, and even draw from it for routine health services such as physicals, teeth cleanings, and eye exams, your overall costs are kept down. In effect, those healthy individuals not currently needing any treatment help those that do.

While this is straightforward in theory, there doesn't seem to be a large consensus as to the best approach to implement such a system. This is evident from the wide array of options, including private programs such as Health Maintenance Organizations (HMOs), Preferred Provider Organizations (PPOs), Health Savings Accounts (HSAs) and public programs such as Medicare and Medicaid. Underneath all the acronyms, the issue boils down to the question of who best can provide coverage to the largest amount of people.

There are those that favor a market approach, just like that employed for most other fee-based service industries and insurance models. Many people are concerned about the government's ability to provide health care efficiently, effectively, and accountably. To them, the problem isn't that medical costs are inherently high; instead, most increases come from rampant litigation of both health insurers and providers. They also cite the effectiveness of the private model by pointing to the U.S.'s current position as the leader in high-quality care and innovations in medical treatment, technology, and pharmaceuticals. Another benefit of markets is choice and competition, where people are free to decide what treatments they need and who should provide them. None of this would be possible, they believe, under a system of government-run, universal health care system.

On the other side of the coin, there are those that believe universal health care is the only way to address the market failures of the current system. There is an attraction to the large number of other industrialized nations that provide national health coverage, some of them even guaranteeing it as a right implied in the constitution. Proponents of this approach question the unaffordable costs of coverage, and point to the large amount of money allocated to doctors' and insurance executives' salaries, ever expanding hospital complexes, growing administrative costs, and the development and promotion of "lifestyle" drugs. Unlike most other industries, there is also a moral imperative because health care deals directly with the health and well-being of people's lives, and many believe it shouldn't be driven by profit. On the issue of government efficiency and cost effectiveness, supporters point to the success of programs such as Medicare and Social Security, and believe that universal coverage could be made through a fractional reduction in military spending.

No matter which side you tend to lean toward, it cannot be denied that there are significant problems with the current system. Besides the large amount of people who can't even get coverage, those that can are having to pay increasingly expensive premiums. Regarding health care costs, there are some truths that can't be denied. Americans pay more for health care than any other nation, with the latest figures putting it at just over 15% of the GDP. Additionally, unlike most other markets, the cost of care continues to rise with the level of innovations, with treatments for advanced conditions now available that were impossible several decades ago. The sources of these rising cost may be hard to trace; while obvious factors such as inflation certainly play a role, other factors such as malpractice lawsuits, medical education and training expenses, an aging population, environmental conditions, and even poor lifestyle habits are frequently cited.

Whatever the causes, something must be done and a big mistake may be to wait for a solution from national health policy. Like wages, perhaps any broad model is bound to fail due the scope of the solution. Problems are often best solved by breaking them down into manageable parts, and with enough communities innovating in the area of health care, it might be possible to find the right answer. Health care is generally a need of local treatment for local conditions, so we as a community should look for local solutions to the growing crisis.

Like with other challenges, we need to look into what resources we already have for potential solutions. Our hospitals have been steadily expanding and advancing their services and facilities, and are now able to treat emergencies and critical conditions that couldn't previously be done within the region. Our colleges and universities, in conjunction with the hospitals, are turning out well-trained medical professionals ready to provide quality care. And within the region there are many organizations, large and small, that need to provide coverage to their employees and are able to help fund these services.

What we need is a way to bring all these parts together. One particularly interesting resource is the Muskegon Community Health Project in Muskegon county, Michigan. As a community, Muskegon recognized the local disparity of access to health care, and decided to develop their own solutions. Their flagship project, Access Health, helps small- and mid-sized businesses provide coverage for their employees by equally distributing the benefit costs between the employer, employee, and the community. Muskegon has also developed other technologically innovative solutions, such as a Web-based medical record system and at-risk juvenile case management system, both which improve the efficiency of their system and are also licensed out for additional revenue.

Out of their effort came many useful case studies and strategies, which they put together in a manual entitled *Out of the Box and Over the Barriers: Community Driven Strategies for Addressing the Uninsured*. However, instead of simply being a ready-to-use model, the manual guides communities to discover and craft the best solutions for their own particular needs. Well-written and backed by experience, it should serve as a framework to guide the design and implementation of our own health care solution. Let's take a look at a potential concept to start with.

One way to help address the health care challenge is to create a local single-payer health care system, pooling all our local resources and providing coverage to organizations and individuals across the county. Under a single-payer system, every organization that seeks to provide health benefits to its members—which could include county and municipal governments, school districts, large corporations, small businesses, and even the self-employed—could choose to pay into a single insurance policy. Such an arrangement would provide many benefits, including a dramatic cut in administrative costs both for providers and the policy agency, a larger pool for risk-spreading, and lower premium costs for everyone.

This new "block" of customers could then shop for a group policy with a major amount of negotiating power, something currently not possible for those holding individual policies. By having a large number of policy holders, administrative costs should be kept much lower (around 6%) than individual ones. With this setup, companies should only be allowed to bid on administrative services of the trust, namely managing member accounts, collecting premiums, and disbursing payments.

Perhaps a more attractive idea would be to have the agency that manages the policy set up as a community corporation and still allow policy holders to choose their providers, as long as they were located within the county. By operating as a community corporation, the policy would be managed efficiently and profitably, but the interests of the community's health would remain the top priority and full control of the company would remain local. As the company becomes well-established, it could begin to provide other types of coverage, such as short-term disability, life, automobile, homeowners, and renter's insurance.

Such a model has additional benefits. Since health care is such a major expense for businesses, reductions in its cost could help efforts to establish living wages. Another goal should be to provide a good amount of basic coverage affordably to the unemployed, part-time workers, college students, and those on fixed incomes. To help keep costs down, it could promote preventative care and reward healthy lifestyle choices through premium discounts and offer a mail-order prescription drug program.

A local health insurance system also will help another important priority of community economics: keeping more money circulating locally. Just like in banks, the money sitting in insurance trust funds isn't simply waiting for new claims—it's being invested. Insurance companies are involved in a diverse range of investment schemes, from mutual funds to real estate, often in very volatile markets. By keeping the money in the community and using it to drive further economic development, it will ultimately enhance everyone's quality of life, possibly further driving down medical costs from crime, stress, pollution, and other economic and environmental factors.

Besides ensuring better health, we also need to increase our people's access to quality education opportunities. As was mentioned above, society has recently matured into the information age, and communities around the world are establishing themselves as "knowledge economies" that focus more on technology and services instead of manufacturing. And while we should continue to promote local production of goods, we also need to expand into these other markets. Thanks to the foresight of our leaders in the academic, governmental, and business communities, this process is well underway. Efforts include an optical wireless network recently installed downtown as part of the "Digital Downtown" initiative, and RACC with their cutting edge nanofabrication program, numerous information technology degree programs, and a new technology and training center.

But this effort—like most critical reforms—must ultimately take place from the ground up. According to the Berks County Data Book, less than 40% of city residents have completed high school or received a GED, and less than 6% have obtained a four-year college degree. Good Schools PA indicates that the number of students failing to meet 11th grade math and reading proficiency has reached 80% and 70%, respectively. In 2003, the dropout rate reached 8.7%—almost four times the state average. To help develop solutions, we need to better understand the problem.

To begin with, the Reading School District continues to face serious challenges. The fifth largest district in the state, it also one of the poorest. In 2002, Good Schools PA reported that 69% of the students were considered to be in poverty. A 2003 report from the district explains that only 80% of the county and state cost-per-pupil averages is spent on our students. This also translates into lower teacher pay and retention levels, facilities in need of repair and modernization, less class materials and technology, and smaller budgets for special programs designed to meet diverse educational needs. In addition, the district is one of the most diverse, having a minority student population of roughly 80%. It has one of the highest concentrations of Latino students (66%), many of which are in need of English language proficiency improvements. And besides a steadily increasing population, there is also a high mobility rate, a common problem in today's communities. School-related violence is also a large problem. Can our youth possibly concentrate and thrive in such an environment?

Recent indicators are proving they can't. In 2002, only 31.2% of students in the district passed the Pennsylvania System of School Assessment (PSSA) test, compared to the state average of 59%.[21] In response, 13 of the district's 19 schools were determined to be in need of improvement based upon provisions of the federal No Child Left Behind (NCLB) act. Six of these schools faced sanctions for failing to make annual improvements, and the other seven were even considered for possible takeover by the state. Although ultimately unsuccessful, the district courageously launched several lawsuits against the state over this verdict, calling the improvement requirements an unfunded mandate.

Regardless of how the community feels about NCLB, the PSSAs, and new Department of Education policies, the reality is that they're here to stay. Additionally, we must recognize that our district was nearly on the edge of a collapse, and is only currently being propped up by additional state and federal aid. This support cannot continue for very long, and the expectations for school

21 The PSSAs are part of a set of newly adopted standards in the areas of reading, writing, speaking, listening, and mathematics.

improvements will only continue to press down upon the district. We've received all the outside help we're going to get, and will need to take matters into our own hands at this point.

It's time to recognize the problem for what it is: economic. While the district certainly could try to better manage its resources, cut costs, shed assets, and seek out additional revenue from larger corporate advertising contracts, the only way to reverse the deterioration of the school district is by working to revitalize the local economy. So what should we do to keep our schools open and regularly improving? The school district should certainly take a more active role in local economic development efforts. This could include making an effort to purchase locally, use local money when possible, and participate in the single-payer health plan. At the core of this challenge, however, is improving the main education funding source: city property taxes.

According to district reports, the local property tax revenue per student in the district is $1,578 compared to the county average of $4,900. The full market property value of a typical city property is $78,281, while the county average for property values is $255,345. Because costs per student aren't generally different than other districts in the county, tax rates must be significantly higher to make up for the difference. And in addition to a shrinking tax base, the city has seen a significant increase in student population, often coming from families who cannot afford to own a home and contribute more back to that tax base.

The most effective way for the school district to stimulate economic development would be to also shift to a land value property tax. This would convert the bulk of property taxes (which is split between the city, school district, and county) to land instead of improvements, which should be the ultimate goal of any tax reform efforts. As it stands, the district should be able to enact a LVT without additional legislation, as in 1993 the Public School Code was amended to allow school districts coterminous with third-class cities to do so.[22] After adopting a LVT, any school tax rate increases would be applied to land instead of buildings.

It must be stressed that property taxes (including land and natural resources) are the only fair and legitimate form of taxation; all others tax away incentives of economic development, with sales taxes falling the most disproportionately on those unable to pay them. **Because of this, the district and community leaders should educate themselves on the issue and lobby Harrisburg to drop the legislation seeking to eliminate school property taxes and request that they instead consider enabling the land value tax as a better solution state-wide.** Given the success of the LVT in Harrisburg, it's hard to understand why lawmakers haven't even considered it. How to distribute the revenue is a more political issue, but determining the best way to collect it should be purely economic.

Funding isn't the only problem challenging our schools, however. The overall quality of the education provided is also crucial to our community for several key reasons. It is vital to the development of our young people, helping them to love the learning process and fostering them into informed, creative, confident, skilled, and well-rounded citizens. Quality education is also a great social equalizer, and each child should be given the same opportunity to be their best throughout school, regardless of their economic and social status, learning capacity and style, or location within the community. Additionally, most families consider the quality of the school

22 HB 438, Section 672, Act 16, 1993 district a fundamental factor when looking for a place to live, so providing an excellent educational system is critical to rebuilding the neighborhoods and tax base of the city.

Although almost everyone agrees that our children deserve the best type of education, no one can seem to agree on just what that education should consist of. Many critics of American public schools call them monolithic relics of industrialization, better suited for training factory workers than enlightening young minds. Reform ideas exist for practically every aspect of school, including class schedules, curriculum, testing, teaching styles, learning styles, socialization, and even building design. These reforms are often packaged as whole models, such as School Renaissance, Quantum Learning, Core Knowledge, and Accelerated Schools. Some parents decide that no program is satisfying enough, and join the growing movement of home schooling. Recently the government has begun weighing in on the subject, passing wide-ranging legislation on the federal and state levels and pushing for greater certification, standardization, accountability, and school choice programs.

While no consensus exists on which educational models will be most effective, many educators do agree that one size doesn't fit all. There are many new ideas to begin exploring for their potential to address local needs, but we shouldn't limit ourselves to taking them on one by one, thereby centralizing the process. **Instead, perhaps the best approach to reinventing education is by applying new innovations through the use of charter schools.**

Essentially a form of home rule for schools, charter schools give more local control to the communities they operate in. They still function as tuition-free public schools, but are free from most state and federal mandates (besides fundamental health, safety, and civil rights regulations). This allows parents, teachers, and the community at-large to develop their own approach to education by designing and implementing innovative models to better serve their students needs. And with several charter schools in the district, more choice and competition can flourish, ultimately leading to successful approaches being spread around a diverse educational system.

For students that do make it out of high school and are ready for the next step, we need to help them continue their education and development. The days of high-wage jobs for workers with little more than diplomas are all but gone, and advanced educational and vocational training are requirements to get a foot in the door of the middle-class workforce. It is also vital to try and retain as many of our promising young people as possible, instead of always losing our best and brightest to the colleges, jobs, and other allures of bigger cities. Having an educated and skilled workforce is critical for our regional economy.

There are many ways to address these challenges. **First, the community should find more ways to help people that want to work towards a degree have the means to do so, whether they're right out of high school or have been in the workforce for over 30 years.** The community could begin to offer lower interest loans than those available through the federal financial aid program, perhaps requiring that the student live and work in the area for several years after they complete their degree. With Congress recently seeking cuts in college funding, we need to develop local alternatives to protect educational opportunities. Additional support could be providing for affordable housing, health care coverage, public transportation passes, and employment opportunities, having students contribute their new knowledge and skills back to the community in return. Programs like these are being done around the country by groups such as the Americorps and Teach for America.

Businesses should also play an active role in promoting higher education opportunities. Besides simply creating more job opportunities, there could be an effort to give hiring priority to local graduates. Additionally, businesses should foster stronger partnership with the local colleges to provide employee trainings and continuing education efforts. More companies are also recognizing the mutual benefits of tuition reimbursement, and incentives could be offered to companies that encourage workers to seek an Associate degree in their line of work. And besides needing the support of their employer, oftentimes the biggest reason people are hesitant to go back to school is because they worry about losing their families' health benefits. By participating in a local single-payer health plan, chances are better that companies could help their workers stay covered even if they cut back their hours to attend class.

Besides better education, there are many other areas of employment that will require community solutions. One of the most glaring paradoxes of our local economy is that while there are many unemployed or underemployed people, there are also many unmet needs and work to be done that could be turned into productive and rewarding jobs. Using the concepts of community corporations, local production, tax reform, community currency, and community reinvestment, we'll be better able to create new jobs that serve local needs, such as keeping the streets clean and safe, maintaining beautiful parks and gardens, repairing buildings and infrastructure, and providing quality child care. Remember, a community is ultimately judged by the way it treats its citizens; to be a great community, we need to help our people be their best.

Local Reinvestment

As we have seen so far, the ways to strengthen the local economy are wide-ranging yet interrelated. By now, you should understand the fundamental concepts of community economics and their important value, including local taxes, ownership, production, purchasing, and labor. It is critical to remember that no single aspect of community economics can effectively address our community's challenges. Instead, a more systematic and holistic view of economic development through self-reliance must be created, using a wide variety of mechanisms and policies, all crafted to the specific challenges of our own community.

At the heart of community economics is a realization that all actions have consequences, and by developing such systems on a smaller scale, each interaction can take on a renewed sense of personal relationships within a culture increasingly dominated by anonymity, remote transactions, and statistical interpretation. The positive dynamics of participating in the local economy can be seen, for example, when tracing the consequential effects of economic multipliers. By understanding the way our economy works, an awareness of the potential for "economic democracy" begins to emerge, and we recognize that every dollar spent is essentially a vote cast for the products, production methods, business models, companies, and society we believe in (or at least are willing to accept).

This idea extends well beyond your wallet, however. Consider what's being done with the money sitting in your checking, savings, or retirement accounts. What does the often large interest rate payments on your credit cards, car loan, and mortgage go towards? Chances are it's not being fully utilized to strengthen our local economy. In fact, your money might be invested in another state—or even country—while being badly needed right here at home.

What sense does it make to live in a community struggling with poverty, crime, low property values, and a weak economy when your financial assets and debt payments—which could be helping to address these local challenges every day—end up elsewhere? Such a situation certainly isn't the best approach for a community seeking self-reliance through money recirculation. If money is designed to be a scarce resource, we must treat it like one by holding onto it and recycling it within our community as much as possible. Whether you need money to borrow or have money to lend, chances are those investment opportunities could be best served through local finance efforts, which can be coordinated through several important steps.

First, we need to identify the many sources of wealth in the community. Things we commonly understand to be "wealth" come in many forms, such as regular income from paychecks, social security and/or pension disbursements, stock dividends, etc. Money from these sources can most readily be captured and recirculated when daily spending needs such as food, housing, transportation, clothing, and other goods and services are purchased locally.

Wealth isn't always in circulation, however. It also is stored in checking, savings, and retirements accounts; health, life, and other insurance trust funds; and as stocks, bonds, mutual funds, and other investments. It is also created through extending debt through lending for home equity loans, business loans, personal loans, credit cards, and other financing options. With often high interest rates on these loans, significant income can be made simply by lending money. Although it might not seem to be true, even predominately poor communities have a large amount of wealth flowing into (and often right back out of) it.

Next, we need to secure that wealth in local financial institutions committed to community reinvestment. Although there are many financial institutions available to provide wealth management services for all these items, a critical examination into just how community friendly they truly are must be done. Many changes have taken place as to the role and scope of the various financial institutions in the community, and just like other businesses, some are better than others at serving the full needs of the local economy.

Traveling around town, one can see the names of old financial institutions that once operated in the community, such as "The Reading Trust Co." and "Reading Savings and Loan." Now operating in some of these beautiful historic buildings are national commercial banks, such as Wachovia, Sovereign, and Citizens Bank. Over time, these previous savings and loans, trusts, and depositories expanded their services, competed for each other's customers, and ultimately ended up merging into the national corporate conglomerates we now understand to be banks today.

Because these financial institutions now operate on such a large scale, it's difficult to preserve the personal relationship that used to exist between banks and their communities. Those in need of loan financing are now competing with a larger set of investment interests, and many banks are more interested in the biggest loan opportunities they can find, regardless of the location. The people to suffer the most end up being the poorest among us, who can rarely get financing to purchase a home or start a small business.

To help address discriminatory lending and low-income neighborhood “red lining,” the Community Reinvestment Act (CRA) was established by Congress in 1977. Supporters of the CRA argue that since banks are essentially insured by taxpayers through the Federal Deposit Insurance Corporation (FDIC), they should be obligated to reinvest more in their communities. To enforce the CRA, the government requires banks to hold public hearings when they make changes such as mergers or branch relocations and let people voice concerns over the changes. With national bank chains however, it’s hard to determine which community a bank is truly a part of, and most people aren’t even aware that they have a voice in these decisions.

This isn’t to say that simply because a bank has its corporate headquarters halfway across the country it doesn’t contribute to or care about the community. To their credit, the banking institutions have had to struggle with the global economic expansion and were forced into external markets and competition with other institutions in new financial sectors such as stocks, pensions, hedge funds, and mutual funds. Just like with money itself, there are new economic realities that need to be struggled with, and banks are especially vulnerable to the volatile dynamics of the global economy.

At the same time, we shouldn’t just accept the state of affairs and allow new economic opportunities to slip through our fingers. And while the CRA certainly helps to remind banks of their roots, there will always be situations that stay off their radar and agenda. Additionally, in pursuing self-reliance, we need to assert more control over our economy in general, and the CRA lacks any real power in reigning in established financial institutions. **Because of these factors, a Community Development Financial Institution (CDFI) should be established to further self-reliance and address our specific local needs.**

Like banks, CDFIs are private sector, market-driven financial institutions. The difference is in their clear mission: reinvesting in underserved and disadvantaged communities. To do this, they specialize in loan and investment programs for individuals, businesses, and community organizations that typically are unable to get help from conventional banks. Their efforts aid in job creation, affordable housing and home ownership, health care, child care, skill building, and other vital services. They are especially important in serving traditionally marginalized groups such as women, minorities, and the poor, as well as protecting borrowers against the increasing threat of predatory and abusive lenders who can get away with asset-stripping options when there’s no where else to turn.

Although this market is much more high-risk than mainstream banking, CDFIs have developed considerable expertise and methods to handle these challenges. To make credit available, CDFIs often will accept unconventional collateral, provide significantly lower interest rates, offer more flexibility when underwriting projects, and ultimately be more patient than traditional lenders. Recognizing that most of their clients are first-time borrowers, they also provide more hands-on help both before, during, and after the loans, such as homeowner counseling, entrepreneurship training, and personal finance education. This helps people gain confidence and financial knowledge, build credit and equity, and become responsible borrowers who can later get access to conventional financing options. Quite remarkably, most CDFIs have success rates that compete with that of traditional banks; in PA the delinquency rate is 2% and the loan loss rate is just 3%.

In many ways, a CDFI is the perfect organization to be first established locally as a community corporation, and can serve as a real model for others to follow. As we mentioned before, they are privately-owned institutions that require financial and social returns for both the community and the shareholders. Although CDFIs' purpose is to supply more capital investments to traditionally "high-risk" segments of the community, they still need to do so responsibly. This sets them apart from many traditional community development programs and organizations, ones which generally rely on grants and government funding and fall apart once the money runs dry (often reverting their efforts). As permanent community fixtures, CDFIs should continue to grow and strengthen with the success of their redevelopment efforts.

Although there is more than enough banking and business expertise in the community to establish a CDFI from scratch, there might be another option. Within the city limits alone, there are 5 credit unions that provide a full range of banking services to their members. In the the Greater Reading area are several more. **By merging some (or all) of the community's credit unions into a CDFI, they could begin to provide a large amount of resources and expertise to serve the reinvestment needs of the community economy.**

Credit unions by their nature are practically one step away from being both CDFIs and community corporations. Established by farmers in the mid-1800s to pool resources and protect their investment needs from loan sharks and poor crops, these financial cooperatives have grown into successful financial institutions comparable to most banks. They generally offer more personalized services and better loan rates, as they operate as non-profits and aren't out try to maximize their income. They also stand out from banks in another important regard: every member of a credit union becomes a part owner in the institution, and can participate in the democratic operation of the credit union by voting for or running as board of directors candidates.

Despite key differences, they still offer all the benefits of traditional banks. Credit union members enjoy checking and savings accounts, personal loans, credit cards, ATM cards, money orders, IRAs, special savings club accounts, life insurance, student loans, mortgage and vehicle loans, and financial planning services. All deposits up to $100,000 are insured by the National Credit Union Share Insurance Fund (NCUSIF). Additionally, chances are good that a member's ATM card is usable without a surcharge at more locations too, because credit unions allow each other's members free access to their machines for withdrawals (and often deposits). Most also have modern on-line and telephone banking systems, too.

Already in PA there are several credit unions operating as full-fledged CDFIs (also known as Community Development Credit Unions). Since their purpose is to serve local people, the residency requirement for membership (and ultimately ownership) is very attractive, and because of their existing business model, credit unions already have one foot in the door to becoming community corporations and CDFIs. While some of our credit unions exist as tightly-knit organizations serving a primarily homogeneous membership with an established identity, they should strongly consider the idea of combining together to better serve the community by becoming a large CDFI. By doing this, they will become the ideal target to store local wealth reserves which will be used to drive community economic development.

Once we have established a CDFI and begin encouraging the community to transfer their funds to it, we need to establish effective ways to use this reserve to finance local economic development. Throughout this paper are fundamental concepts and concrete ideas for new economic opportunities. New microenterprises may be started in people's basements, backyards, kitchens, and home offices, while several existing businesses may decide to form a cluster or merge into a corporation and begin production on a larger economy of scale. Almost every new venture needs startup capital, and even established enterprises require regular financing, so we need to have a wide variety of finance options available.

The most obvious service would be conventional business loans. If many local businesses decide to help support self-reliance by expanding local production, most will need financing to purchase the necessary capital. **The CDFI can certainly help in this effort, primarily by offering lower interest loans than that provided by regular banks.** It can also have a larger hand in the effort, coordinating member companies to do business with each other whenever possible by forming an internal trading circle, or to use the CDFI for certain financial services, such as payroll. Through efforts such as these, the CDFI will not only help local businesses develop, but also encourage borrowers to reinvest their money back into the community as much as possible.

For small-scale entrepreneurs, especially those without much business experience or good credit, the CDFI should offer a microloan program. Microloans are essential for many small businesses, allowing them to steadily build credit while acquiring new capital as they grow. In such a program, loan applicants receive consultation and determine the minimum needed that can be promptly repaid, perhaps $500-1,000 dollars. While it might fund something simple like a computer and software, it often makes a genuine impact on the enterprise and boosts both productivity and profits. Once the initial loan is repaid, subsequent loans can be drawn for incrementally larger amounts, further funding business development and opening opportunities for significant loans once a credit record is well-established. To ensure borrowers have the best possible chance of repaying, the CDFI can monitor their progress, help them prioritize their operating expenses, and adjust payment schedules.

The CDFI can also involve its general shareholders in the reinvestment effort. The most obvious thing to do would be to continually report to the members how their money is being reinvested. Success stories should be regularly highlighted to let people know they're directly helping to create local jobs and grow local businesses. A directory of member businesses should also be made available, and members should be encouraged to proudly patronize them (which helps the borrowers pay back debts to the CDFI, which is good for all shareholders). Also, special investment funds for incubator projects could be set up by the CDFI itself, and depositors could choose which projects they'd like to have their money invested in. This option is nice for small business that don't have stock shares to sell but still need capital infusion. And while depositors won't have direct shares in the project, they can help influence its positive direction through the CDFI, all the while running a low risk through their investment because their deposits are still covered by the FDIC or NCUSIF.

There are other types of loans the CDFI can make available. With a LVT established, property improvements won't be penalized and property owners won't be as reluctant to begin renovating. A CDFI can capitalize on this and drive neighborhood revitalization in important ways. **One excellent strategy is to begin a series of "targeted investments" in various underserved**

sections of the city. The ShoreBank in Chicago has provided an excellent model for such an effort. Through a targeted investment, the CDFI pledges to provide special loan packages for mortgages, home improvement, or business establishments in a designated areas (the reverse of red-lining done by many commercial lenders). This will help put marginalized neighborhoods back on the development agenda, turning abandoned buildings into shops, restaurants, homes, community centers, and modern apartments. This should spur additional interest in other reinvestment and redevelopment, helping to clean up the streets and upgrade infrastructure, ultimately increasing property values and the tax base.

To help such an effort, the CDFI should take advantage of federal economic development incentives such as the recently established New Markets Tax Credit. Designed for low-income areas, this tax credit rewards CDFI investors with dollar-for-dollar deductions against their federal taxes. The funds can then be used with few restrictions for local redevelopment efforts, such as housing rehabilitation, business loans, health clinics, child care facilities, or even charter schools—all crucial to the low income people the projects must be designed to serve. The New Markets Tax Credit, especially when managed by a CDFI, is an excellent way for existing businesses and wealthy individuals that depend on the health of Reading to make a big impact through targeted investments.

There are many more ideas just waiting to be discovered and implemented under a local reinvestment model. One previously mentioned possibility is educational loans, which can be tied to local residency and community service requirements. The community should also explore other investment opportunities, such as pensions. There is a strong argument that pensions funded primarily through local taxes should be reinvested in the community. Those receiving local pensions should support this too, especially if they plan on retiring in the community.

As a final thought, besides local reinvestment strategies, we still need to understand how our money plays a role in the global economy and take steps to ensure we aren't actually funding the types of things that weaken community democracies, economies, and environments abroad. In the 1980s, hundreds of communities in the U.S. and around the world came together to produce an economic show of force against business and pension investments in South Africa's system of apartheid. Through this effort, it showed how communities can work together and help effect positive global change, not just be affected. So besides taking control of our local economy, we must help others do the same for themselves.

One of the best frameworks for both education and action on local and global investment are Solari investment circles. The Solari framework helps investors navigate the sea of global economic activity, while still having control anchored in the local community. As Solari's founder, Catherine Austin Fitts, explains,

> *"Solari Circles are informal clubs focused on local efforts to help its members save time, barter, save money, and generate income—all in a manner that address the diminishing reliability of—and increased risks created by—government and corporations. Solari Investor Circles are local investment clubs that focus on local investment, rather than investment in the stock and bond market. The notion is that the way to create sustainable communities that integrate the best of new and old technology—such as alternative energy, alternative health care, biodynamic farming*

—is to find a way to that successfully addresses our practical short terms problems—and the serious and growing risks involved—in making."

A Solari circle is an "investment databank" and a local advisor that serves as an investment club. Several Solari circles can exist in the same community, each seeking out new opportunities and keeping its membership to a manageable level. Through the tracking of community assets and indicators (see Appendix A), import dependencies, unmet local needs, and other factors, the circles can help analyze current local market conditions and promote investments that both optimize current resources and also create new wealth. It also improves the investment literacy of its members through the circles' efforts, providing a window into the investment world and "how money works" typically not available to ordinary people. Because of their focus, Solari circles make ideal engines for local equity reinvestment in community corporations and other economic ventures (a community stock exchange, so to speak).

Like those designated for community corporations, there are two types of common equity: Solari A and Solari B. Solari A shareholders have residency requirements and serve as voting (i.e. governing) members of the circle. Solari B shareholders hold economic ownership of the funds and drive efforts to produce capital gains. In the end, both classes profit from Solari B investment efforts. Through the balance of the two, both local and global investments can be made, but control over the circle always remains with the local leadership.

Some of the things a Solari circle would invest in include consumer aggregation; small business/farm aggregation; small business incubation, back office and marketing support; neighborhood venture funds and investment trusts; community offerings and wider stock placements and offerings; debt-for-equity swaps on performing and defaulted government and private debt; buyouts, reengineerings, renegotiation and waivers of government investment and regulation; and community currency and barter networks—all things important to a self-reliant (and self-aware) economy.

Part III: Environmental Sustainability

"When the well is dry, we will know the value of water."

–Benjamin Franklin

"There is a sufficiency in the world for man's need but not for man's greed."

–Mohandas K. Gandhi

"Achieving sustainable development is perhaps one of the most difficult and one of the most pressing goals we face. It requires on the part of all of us commitment, action, partnerships and, sometimes, sacrifices of our traditional life patterns and personal interests."

–Mostafa Tolba

The environment, when most clearly defined, is the natural world existing both within and around our community. It includes the air we breathe, the water we drink, and the soil upon which we live. Quite simply put, there is nothing more vital to our lives than the natural world. As such, it becomes obvious that the environment plays a critical role in the health and well-being of our community, so protecting our community requires also protecting our environment.

To best safeguard our environment, we must develop a plan to use natural resources sustainably without damaging or depleting them, so that the needs of today's generations will also be able to be met by the generations of tomorrow. But how can we best accomplish this? There are many approaches to sustainability, with some more effective and comprehensive than others. Additionally, there will be concerns about the ability to develop a strong economy if too much priority is placed on environmental protection. The good news is that ecology and enterprise can co-exist; in fact, the two are more dependent on each other than you might imagine.

One of the first lessons of economics is about the factors of production—the engine of economic activity. The three factors of production are land, labor, and capital. Capital, which can be thought of as the raw material for the provision of goods and services, is the result of labor (human exertion, whether through brain or brawn) being applied to the natural resources of land (soil, wood, minerals, water, plants, animals, petroleum, etc.). Without land and the resources it provides, there can be no economic activity. Even the most advanced goods and services, such as art and technology, depend on the basic resources of land and the labor applied to them.

So in a nutshell, all wealth therefore comes from the land—otherwise known as the environment. To be strong economically, we need to ensure that our raw sources of wealth are being utilized in ways that protect their long-term availability while still fueling current economic development. Because of this, sustainability and self-reliance go hand in hand; the more sustainable our use of vital natural resources, the more self-reliant our local economy can become. These dynamics require us to reorient our thinking about the environment, and to develop new attitudes and approaches to the idea of sustainability. We will then begin to develop a new language and set of priorities for our change agenda, one that encourages sustainability to enable self-reliance.

As a first step, we should begin this commitment by signing on to the Green Cities Declaration and adopting the Urban Environmental Accords. Introduced during World Environment Day 2005 in San Francisco and signed by the mayors of 50 innovative cities from around the world, the Accords is a document listing 21 specific actions for sustainable urban living. Each action seeks to address one of seven environmental challenges common to all the world's cities: water, energy, waste, urban design, transportation, urban nature, and environmental health. Some of the actions are achievable immediately, while others will take several decades to accomplish. We'll visit many of these goals in the sections below.

While adopting the Accords is a positive beginning, we need a deeper set of principles to drive our sustainability efforts. Many communities have turned to the Smart Growth model to guide this process, and usually use it to draft their regional comprehensive plans. An outcomes-based approach, Smart Growth provides guidelines to help communities focus on the areas of neighborhood livability, transportation, economic development/equity, and open space. As detailed by Smart Growth America (a coalition of national, state, and local organizations involved in historic preservation, the environment, farmland/open space preservation, and neighborhood revitalization) explains, Smart Growth promotes the following key priorities:

1. *Mix Land Uses.* New, clustered development works best if it includes a mix of stores, jobs, and homes. Single-use districts make life less convenient and require more driving.

2. *Take Advantage of Existing Community Assets.* From local parks to neighborhood schools to transit systems, public investments should focus on getting the most out of what we've already built.

3. *Create a Range of Housing Opportunities and Choices.* Not everyone wants the same thing. Communities should offer a range of options: houses, condominiums, affordable homes for low income families, and "granny flats" for empty nesters.

4. *Foster "Walkable," Close-Knit Neighborhoods.* These places offer not just the opportunity to walk—sidewalks are a necessity—but something to walk to, whether it's the corner store, the transit stop or a school. A compact, walkable neighborhood contributes to peoples' sense of community because neighbors get to know each other, not just each other's cars.

5. *Promote Distinctive, Attractive Communities with a Strong Sense of Place, Including the Rehabilitation and Use of Historic Buildings.* In every community, there are things that make each place special, from train stations to local businesses. These should be protected and celebrated.

6. *Preserve Open Space, Farmland, Natural Beauty, and Critical Environmental Areas.* People want to stay connected to nature and are willing to take action to protect farms, waterways, ecosystems, and wildlife.

7. *Strengthen and Encourage Growth in Existing Communities.* Before we plow up more forests and farms, we should look for opportunities to grow in already built-up areas.

8. *Provide a Variety of Transportation Choices.* People can't get out of their cars unless we provide them with another way to get where they're going. More communities need safe and reliable public transportation, sidewalks, and bike paths.

9. *Make Development Decisions Predictable, Fair, and Cost-Effective.* Builders wishing to implement smart growth should face no more obstacles than those contributing to sprawl. In fact, communities may choose to provide incentives for smarter development.

10. *Encourage Citizen and Stakeholder Participation in Development Decisions.* Plans developed without strong citizen involvement don't have staying power. When people feel left out of important decisions, they won't be there to help out with tough choices.

While Smart Growth does provide some good ideas and approaches, it has fundamental limitations that prevent it from being a comprehensive framework for sustainability. More a set of guidelines for regional planning and an effort to help curb sprawl, Smart Growth pays little attention to important areas of sustainability such as energy production, ecological design and industrialization, and resource consumption. Our framework must be comprehensive enough to apply to all aspects of community life and yet simple enough to be explained and readily understood in several minutes.

Based on these criteria, the best foundation to build our sustainability efforts upon is the Natural Step framework. Discovered by the Swedish team of Dr. Karl-Henrik Robèrt, a cancer research specialist, Karl-Erik Eriksson, a professor of theoretical physics, and John Holmberg, a graduate physics student, the framework is the result of their efforts to research and develop a complete model for a sustainable society, using the fundamental principles of biology, ecology, and thermodynamics. Their main argument is that two global trends—a deteriorating natural environment and increasing rate of population and consumption—are in the process of converging upon each other with unpredictable and perhaps irreversible consequences (similar to a funnel), and our ability to stabilize these trends may be diminishing unless we take major steps to prevent this from occurring. To address this problem, the researchers have identified four "system conditions" that all have to be met for our actions to be determined sustainable or not.

First, nature must not be subject to systematically increasing concentrations of substances extracted from the earth's crust. Many of the natural resources we depend on, such as heavy metals, minerals, and fossil fuels, exist underground and must be mined for us to access them. While the process of mining itself is dangerous and destructive (witness the multiple mining tragedies of 2006 alone), there is also a hazard of the steady build-up of emissions from these materials on the earth's surface and in the atmosphere. Because they are elements it's not possible to break them down further, and many of these substances are disruptive in large quantities (carbon dioxide, nitrogen oxide) or even toxic (mercury, lead, cadmium). And once these materials enter the environment, they are there to stay and become more likely to end up in the air we breathe, the water we drink, and the food we eat.

Second, nature must not be subject to systematically increasing concentrations of substances produced by society. While many substances and materials we produce come directly from natural resources, we also manufacture over 70,000 synthetic substances, many used in our everyday lives. Because they are synthetic, they don't readily break down after use and can remain in the environment for generations, often with unintended consequences. They can appear in household chemicals, furniture, clothing, manufacturing processes, and building materials, from which they off-gas, abrade, or otherwise escape into the air or leach into the water and soil, often far away from their original source. Besides collecting in nature and disrupting and destroying species and ecosystems, these chemicals are also accumulating in our bodies and reacting with each other, causing cancer, endocrine disruption, allergies, chemical sensitivity, respiratory ailments, infertility, and brain and behavioral disorders. Within our community, often the children—both born and unborn—are at the greatest risk.

Third, nature must not be subject to systematically increasing degradation by physical means. In many ways the activities of human life are destroying our natural life support systems (air, water, soil, forests, ecosystems) faster than they can recover. Our modern methods of building homes and communities, cultivating land, growing food, creating energy, eliminating wastes, using water, designing transportation networks, and producing goods and services are completely unsustainable and out of step with natural processes. By more carefully considering the effects of our actions and shifting to more sustainable practices, we'll be able to protect the thousands of vital life support services, such as photosynthesis and cell respiration—treating the environment like our lives truly depend on it.

Fourth, human needs must be met worldwide. Throughout history, society has been engaged in a self-destructive competition for access to and control over resources, often resulting in conflict, violence, terrorism, and full-scale war. Roughly 80% of the world's resources (and resulting wealth) are controlled by only 20% of its population, which can perhaps begin to explain mounting tension between the developed and developing countries. We need to shift our domestic policies towards local production for local consumption and also develop foreign policies that seek to help other countries do the same.[23] These efforts will do the most to ensure a just, equitable, sustainable, and peaceful future for all the World's people.

Unlike many forms of environmental research, the purpose of the Natural Step's four system conditions isn't simply to present bad news and leave you feeling guilty and helpless. From these system conditions emerge four "guiding objectives," which when used together provide a compass for the development of systematic sustainability policies. These principles will serve as the guidelines for our sustainability efforts in the sections below:

1. Eliminate our community's contribution to fossil fuel dependence and to wasteful use of scarce metals and minerals.

2. Eliminate our community's contribution to dependence upon persistent chemicals and wasteful use of synthetic substances.

3. Eliminate our community's contribution to encroachment upon nature (air, water, soil, wildlife, forests, ecosystems).

23 One of the most telling—and tragic—examples of the distortions created by the current form of the global economy is food production. When countries such as the U.S. promote trade policies for cheap food imports and exports, it destroys the agricultural industries that developing nations' economies depend on, causing their citizens to literally starve while food is grown on their soil (by foreign land owners) strictly for export purposes and leaving the people unable to buy even the cheap foreign food imports due to the lack of farm labor opportunities.

4. Meet human needs fairly and efficiently.

Besides providing a set of core guidelines for sustainability, the Natural Step framework also has developed a collection of real-world applications of these principles that have been successfully implemented by both businesses and municipalities around the world. In a book entitled *The Natural Step for Communities*, the authors Sarah James and Torbjörn Lahti introduce us to the sustainability program of Sweden, where the whole country is adopting the Natural Step framework and applying it to every level of society.[24] Additionally, the book *The Natural Step for Business* details the success stories of companies such as IKEA, Scandic Hotels, Interface, and Collins Pine that have used the Natural Step framework to become environmentally sustainable and incredibly profitable—both important goals for our revitalization efforts. We'll review many of these ideas and applications below, adapting them to meet local needs and conditions.

Energy Supply

Perhaps the most urgent area requiring a shift to environmental sustainability is our community's energy supply. We rely on energy to power our buildings, vehicles, technology, equipment, and infrastructure, and this energy comes from a variety of sources, including coal, oil, natural gas, and nuclear power. An effort to change will require not only the consideration of who, what, and where we get our energy from but also how we use it. All this is necessary because there are major problems with every aspect our current energy practices.

No where else is the problem more evident than the issue over oil. It is a topic everyone's talking about, whether the concern is the rising costs of gasoline and heating oil or its role in the Iraq war. Oil—more specifically petroleum—is the fuel of modern of life, and breaking away from this dependency and onto something else will be one of the biggest challenges of the 21st century. It is a challenge that we must begin to address however, because continuing to ignore it will only lead to more of the political, economic, and environmental problems and risks petroleum imposes.

Because our way of life depends on petroleum and the many substances produced from it, access to it remains a top geo-political priority. By the 1970s, the U.S. became a net oil importer—meaning that we began consuming more than produced domestically—and now relies primarily on the oil-rich middle-eastern countries, as well as Russia, Brazil, and Venezuela. Many of these countries are controlled by unstable and unfriendly regimes, and yet are largely funded by American consumption. And with the developing countries such as China and India expected to surpass the U.S. in demand for energy as their economies expand, tension over this scarce and non-renewable resource—the supply of which is expected to "peak" in 10-20 years—will continue to mount.[25]

Our lives depend on petroleum because our economy is based on it. Economic self-reliance can never be achieved as long as we rely on external and non-renewable sources of energy, which

24 One of the most recent successes of Sweden's sustainability program is a realistic plan to make the country free from dependence on foreign oil by 2020.

25 These are conservative estimates; some petroleum experts believe we've already reached peak oil, and evidence can even be seen within the petroleum industry, who hasn't invested much into new refineries or exploration even as revenues continue to reach all-time highs.

force our foreign policy and money to be wasted on constant efforts to access and secure petroleum sources, often triggering anti-American sentiments, terrorism, and military intervention in the process. Additionally, sudden disruptions in the supply of petroleum—through poor output, social upheaval, and natural disasters—can quickly damage our entire economy through price inflation or worse.[26]

And perhaps most widely discussed, our use of petroleum and other fossil fuels such as coal and oil/tar sands produce devastating changes to the environment. Besides the damages and risks of locating, extracting, refining, transporting, and burning these substances, the threat of global warming is becoming an issue we cannot afford to ignore. More than simply a small increase in average temperature, such climate change could trigger a variety of major problems, including rising sea levels and flooding, a wider spread of infectious diseases, and an increase in the number and severity of hurricanes, droughts, and desertification. Mounting evidence also suggests that an increase of 3-5 degrees triggered the last Ice Age—a tragic irony of global warming that could enact untold and irreversible damage to our civilization. In a February, 2006 edition of the journal Science, researchers presented findings that indicate that global temperatures of the 20th century have been higher than at any other point in the last 1,200 years.

And while most people remain either ignorant or in denial of these problems (although the number is steadily shrinking even in the Bush administration, who admitted in the 2006 State of the Union address that the country is "addicted to oil"), others are quietly making strides to prepare for the inevitable. Most notably are the oil companies, who while desperately holding on to their multi-trillion dollar investments in petroleum infrastructure are retooling themselves to remain in control of whatever form of energy becomes the dominant replacement. Look in any popular magazine, and you'll see ads from Shell promoting their Shell Renewables program, the result of efforts to acquire small wind and solar power companies. The company once known as British Petroleum now calls itself Beyond Petroleum and is one of the leading producers of solar panels and natural gas. Other companies and organizations are also beginning to finally recognize both the obligations and opportunities of becoming "early adopters" of the post-carbon economy.

But not everyone is on the ball. Besides people who still insist upon giant SUVs and high-energy lifestyles, the worst offenders are the policymakers of our own government, who hold the power to make the changes necessary to move the country into the right direction. Passed in the summer of 2005, the 1,724-page federal energy bill will do little to address the core issue of the country's dependency on oil and is instead filled with expensive and ineffective subsidies for every corner of the conventional energy industry, as well as major reductions on environmental regulations and local control. And instead of common sense measures to increase fuel and pollutions taxes, tighten energy efficiency regulations, and invest the resulting revenue and fines into critical energy research and development (all the while fostering a market-driven energy revolution), we received an extension to daylight savings time and a commitment to build more nuclear power plants (which besides their exorbitant cost to taxpayers, pose major threats to community health and national security).

26 We saw this happen recently with the storm Katrina, which practically paralyzed the refineries and distribution networks in the Gulf, and resulted in increased fuel and oil prices across the country.

Therefore, if we want an effective energy policy that focuses on real priorities, we'll have to develop and implement it ourselves. Such an effort won't be easy, as shifting to sustainable energy will have a significant effect on our way of life, but like a major operation, will cause less pain in the long run. Additionally, there is a wealth of resources, expertise, and successful models to draw upon, all offering exciting potential to help us take control of our energy needs.

As a first step—because it is ultimately cheaper to save a unit of energy than to produce one—we should develop a comprehensive energy conservation policy. By doing our best to reduce energy consumption, we'll be able to redirect—and reinvest—that regularly wasted money into better alternatives. Due to the increasing price of heating oil and gasoline, people are already becoming seriously concerned and have begun taking steps to cut costs—with the market responding. Many people are stocking up on fire stoves and other heating alternatives, and billboards advertise low-MPG vehicles. Besides helping to reduce energy usage, conservation can also increase local business opportunities.

Many conservation efforts are simple habits that require little thought or effort, like shutting off unnecessary lights and turning back the thermostat. Others are more complicated and involve certain expertise, such as determining how best to insulate buildings and modify energy-use patterns. And while consumers can and should take actions such as switching to compact florescent bulbs, sealing up drafty windows, and using more efficient shower heads, the installation and maintenance of high-efficiency appliances and water, heating, air conditioning, electrical, and ventilation systems will need to be provided by companies skilled in these areas.

Responding to the demand for conservation services, new businesses are emerging to fulfill this important need. Known as Energy Service Companies (ESCOs), they specialize in designing and implementing energy-saving solutions for homes, businesses, and governments. ESCOs can help developers design new buildings as energy-efficiently as possible, and can also modify existing structures through upgrading insulation, appliances, doors, windows, lighting, and HVAC/R systems. By reviewing current energy costs, an ESCO can provide a savings estimate and provide the necessary hardware, software, and labor to meet or exceed that target.

It is important to emphasize that conservation efforts must extend beyond technological improvements. Our energy demands are fueled by our lifestyle choices, so any effective measures require a significant shift in our attitudes and values. Real efforts to change will subsequently affect every aspect of daily life, including the food we eat, the home and neighborhood we live in, and the way we get around. New lifestyle patterns in each of these areas will be necessary, and will be explored in more detail below.

Through a community-wide effort to reduce our energy consumption, we'll be best prepared to address the resulting energy needs. But while conservation is a necessary first step and an excellent exercise to get us thinking about our energy use, it won't solve the problem of our dependency on fossil fuels. **To reduce this dependence, we also need make every effort to support the use of renewable energy.** By understanding the current conditions and the problems associated with this dependence, including what kind of energy we use, how it is produced, as well as where (and who) it comes from, we'll be better informed and able to develop sustainable energy solutions.

We currently rely on several companies for our energy needs, including Met-Ed[27] for electricity and UGI for natural gas. Because the energy industry in Pennsylvania was deregulated several years ago, it might be confusing trying to find complete answers to these questions. Whereas before your electricity needs were simply provided by your "supplier," now the industry has been split up into three distinct categories: (1) generation, meaning the actual production of energy, (2) transmission, the movement of electricity from the point of production to the point of distribution, and (3) distribution, which is the delivery of the electricity to consumers. Natural gas follows a similar chain of commodity (supply), transmission, and distribution. The only part of the supply chain to be deregulated was production/commodity. This allows consumers to choose their energy producer, while the energy is still distributed using the shared infrastructure and the local utilities.

While there are fundamental problems with the deregulation, it does open up some interesting opportunities. For instance, almost all of our electricity is generated in coal-burning plants (although some additionally comes from other sources, such as nuclear and natural gas). Because consumers can now choose their supplier, demand for more clean energy can be channeled into generating plants that produce electricity using renewable resources. Encouragingly, some companies have been stepping up to meet this need. Here in PA, several companies have been offering renewable energy to electricity consumers, including Green Mountain Energy and Community Energy/New Wind Energy.[28] These companies use a mixture of different renewable energy sources to generate electricity for their customers, including solar power, wind power, and biomass.

Solar power has made considerable progress in the last 30 years (even with some periods of low public support for the technology), and looks to be a promising source of energy for the community. Because the energy source (sunlight) is renewable, clean, abundant, and free, it makes perfect sense to utilize it as much as possible. With the third generation photovoltaic (PV) technology already developed in research labs and a rise in global demand from Asian and European countries bringing down costs, it's time to reconsider this important source of energy.

Solar power is especially well-suited for small-scale power generation or "microproduction" applications, and as a supplement to conventional electricity (especially in the peak periods of summer). Solar panels can be placed on homes and other buildings, providing additional power and saving money from grid-drawn electricity, or storing it in batteries to provide backup electrical supplies in case of power outages. It can also provide power to smaller spots, such as sheds, barns, bus stops, and facilities in remote areas, which eliminates energy costs and can cut down on the need to maintain transmission equipment to the locations. Another application is in the area of outdoor lighting, including street lights, billboard lights, porch lights, and landscape lights. Some innovative communities have solar cells on streetlights feed power to the main grid during the day and draw off it during the night using high-efficiency and low-maintenance LED bulbs. Others are installing solar-powered porch lights on all homes and other buildings in neighborhoods to effectively reduce night-time crime.

27 Formerly known as GPU and now a subsidiary of First Energy.

28 As of November 2005 Green Mountain Energy will no longer provide electricity to PA consumers, citing rising operating costs and state price caps. The good news however, is that New Wind Energy is now offering generation service in the Reading area to new customers.

To supply electricity on a larger scale, arrays of solar collectors—often covering an acre or more of land—can be installed on large, sunny fields surrounding a community. Electricity generated from these arrays can then be fed into the local power grid, reducing the community's overall energy costs. In addition to conventional PV, some advanced systems are taking new approaches in the area of solar thermal, such as the one being developed and tested by Sterling Energy Systems. This type of system, called a concentrating solar power (CSP) system, uses the thermal energy of sunlight directly. Instead of fixed panels, the solar collectors are designed as reflective dishes that rotate as the sunlight's angle changes throughout the day. Mounted on each dish is a sterling engine—a superefficient engine—that is heated by the mirrors' reflections, similar to the effect of sunlight through a magnifying glass. This heat powers the engine, which in turn generates electricity. Groupings of these CSP dishes could eventually become cost-effective enough to replace conventional fossil-fuel power plants.

Even more promising than solar—at least presently—is wind power. Like sunlight, wind is a renewable, clean, abundant, and free energy, and is a valuable alternative source for our power needs. In fact, to see the viability of wind power, you don't even have to travel far: wind power is already being generated in PA on a large scale in Somerset, Fayette, and Wayne counties. Combined, these wind farms are generating enough electricity to help power almost 30,000 homes as well as several large corporations and universities. A recent study done by Standford University even reports that North America offers more opportunities for wind power than anywhere else in the world.

Like solar power, the technology and economics of wind power continues to steadily improve. Companies like Vesta and General Electric are busy designing the next generation of wind turbines to make them cost-effective and high-performance. Like the solar dishes, newer wind turbines can rotate to follow the direction of the wind, which helps reduce the latency between air currents. Other companies are looking to float wind turbines several miles out into the ocean, where the supply of air current is much greater.

Wind power has an advantage over solar power for several reasons. First, the technology is incredibly simple: the force of the wind causes the fan blades to rotate, which allows the turbine to generate electricity. Solar cells are more complicated, as they passively convert sunlight to an electrical current. Because the fundamental wind technology is already fully matured, all that is necessary is growth of the economy of scale. As more communities set up wind turbines, which can begin with one or more units and then scale out into an entire wind farm as needed, the cost will only continue to go down. This approach is much lower than building new coal or natural gas power plants, including ongoing operation, maintenance, and fuel expenses. Additionally, the wholesale cost of wind power is becoming competitive with conventional electrical generation, something we won't see from solar technology for a conservative estimate of 10-20 years.

And while solar and wind power can help supplement our energy needs, perhaps the most accessible and immediately viable energy supply is growing in our own backyard. This energy source, called biomass (or bioenergy), is essentially anything that can be burned to effectively produce heat. But while some biomass promoters advocate burning just about anything—plant material, animal waste, and even trash—we will restrict the term to only include the use of plant materials such as wood, corn, and switchgrass.[29] When burned or broken down, these materials can be used as fuel to produce heat and generate electricity.

Biomass is appealing for many reasons. Although also a fuel that produces greenhouse gases when burned, this CO_2 is reabsorbed through a process known as carbon sequestration into the new trees and plants that will serve as the next supply of energy, something not possible with fossil-fuels. Much of the several hundred million tons of agricultural waste (i.e. food and lumber waste) thrown away each year could be processed into biomass fuel as well (as long as it is free from toxins). And because biomass can be produced by most communities that consume the resulting energy, the dependency on external energy is greatly reduced. As you can imagine, a shift to biomass for our primary energy needs could be a huge boon to our struggling farms and rural communities, offering the best thing that could happen to them in almost a 100 years.

One of the most common applications of biomass is processing wood and other plant fiber into small pellets. These pellets, which are much easier to transport and store, are then burned to boil water, produce steam, and generate electricity (as well as hot water supplies). In this fashion, biomass is much more cheaper and burns better than coal or oil. It also scales well, able to supply heat and power for individual buildings or fuel large power plants. Naturally cleaner than fossil fuels, it can be further improved by scrubbing the smoke emissions, and the resulting ash can be composted back into the soil.

Biomass can also be manufactured into other forms, such as liquid fuel. You may be familiar with ethanol, a clean-burning fuel derived from corn. Seeing its potential and the need for new alternatives, both Ford and GM recently unveiled a whole range of vehicles ready to run on E85, an 85% ethanol fuel blend. The challenge with ethanol though, is that it currently seems to require more energy to produce it (often using fossil fuels) than it subsequently provides, which certainly isn't a sustainable process. More promising, at least presently, is biodiesel, which also comes from corn and soybeans and has a positive energy ratio of 1 unit for production to 3.2 for consumption. Besides those positive properties inherent to being a form of biomass, biodiesel possesses additional benefits.

As a first-class form of diesel fuel, it can be used in any diesel engine with no modifications necessary; it can even be mixed with petrodiesel.[30] It also cleans engines and fuel lines, helping them run smoother. Compared to petrodiesel, it produces no sulfur dioxide and less than half the emissions of soot, carbon monoxide, and hydrocarbons, while still providing roughly the same mileage per gallon, speed, and torque. Besides being engine fuel it can also function as a replacement or supplement to home heating oil, and with the current costs of oil and gasoline biodiesel is already competitively priced. It has a byproduct of glycerin, which could be used in hundreds of applications, and has other uses besides fuel, including an adhesive remover, a mold release agent, an asphalt cleanup agent, an oil spill cleanup and bioremediation agent, an auto wax remover, a corrosion preventative, a parts cleaner and degreaser, a graffiti remover, a paint and resin cleanup, a hand cleaner, a crop adjuvant, a metal working lubricant, and a screen printing

29 Biomass should also be grown organically, and not with the use of genetically-modified organisms or chemical fertilizers and pesticides. Besides preserving the soil for future crops, it also ensures the resulting fuel is free from harmful synthetic chemicals and burns more cleanly.

30 In fact Rudolph Diesel, the German inventor of the Diesel engine, envisioned his engine being able to be powered by local sources of biofuel. At the 1900 World Exposition he even used peanut oil for fuel as part of his diesel engine demonstration.

ink remover. Unlike most other forms of fuel it can even be made in the kitchen, bringing the production of fuel much closer to the point where it is consumed.

Even diesel engine technology itself is a much better alternative to standard gasoline internal combustion engines (ICEs). Its main advantages include better fuel economy and a longer engine life, and newer developments are addressing the historical issues of emissions, noise, vibrations, ignition, and cost.[31] Diesel ICEs are very versatile, and can be used to power just about anything, including pumps, compressors, generators, motorcycles, cars, trucks, buses, tractors, boats, and aircraft. And because diesel technology and infrastructure is already in place, we could begin using biodiesel immediately to power the equipment and vehicles needed in our community. In the future, hybrid vehicles could be powered using a biodiesel-electric combination, too.

Because of these qualities, biodiesel provides the most attractive alternative to petroleum-based fuels. And as both an industrial and agricultural center, Berks county should become a major producer (and consumer) of biodiesel fuel and related technology and services. From the soil to the pump, local companies could be established to produce, distribute, and utilize this promising oil alternative. Other businesses could thrive selling, repairing, and refurbishing diesel engine vehicles and equipment. Colleges and labs could research diesel engines and fuel, finding ways to produce and consume it in cleaner and more efficient ways, such as by utilizing algae.[32] If the county wants new industries and jobs—and the accompanying economic and environmental security, this is one opportunity it must not miss.

In fact, biodiesel is already catching on in Pennsylvania. A company called AmeriGreen, based in High Spire, PA, is already producing biofuel and bioheating oils and distributing it through local oil/heating companies in Berks, Lancaster, York, Harrisburg and other areas across the state. Several additional refineries are being constructed in the Harrisburg area, and biodiesel is beginning to be offered at some gas stations as well. Here in the county two companies already offering biofuels are Bernville Quality Fuels and Moyer Plumbing and Heating. Hopefully these early adopters will gain community support and the demand for biofuels will quickly grow as we seek self-reliance and sustainability for our energy needs.

But what about hydrogen, the “darling” of the renewable energy industry? Although widely touted as the perfect solution to the energy crisis, hydrogen power is at least several decades away from any realistic viability. Many energy experts believe that we don’t have that long to wait for a perfect solution, as peak oil might be reached withing the next 10-20 years. Additionally, there are many issues with hydrogen technology, such as how best to produce it, store it, and transport it. Because of this, we need to begin implementing “bridge” forms of energy now, such as solar, wind, and biomass/biodiesel to counter the expanding use of other transitory (and fossil-fuel based) approaches, including natural gas and “clean” coal. Even if hydrogen technology does becomes mainstream, it’s going to rely on other renewables like solar and wind to produce the hydrogen, necessitating an existing renewables infrastructure.

31 Johnson Matthey’s Environmental Catalysts and Technologies (ECT) group in Wayne county manufactures advanced catalytic converters and filters that can provide clean diesel technology for light- and heavy-duty diesel engines.

32 To produce enough biodiesel for the entire country’s needs, research is underway using fast-growing, oil-yielding algae instead of conventional plant crops.

However, we can't afford to wait for a national hydrogen infrastructure and economy to develop, and perhaps we don't even need one. Current renewables—especially biomass and biofuel—can be truly effective at meeting all of our energy needs now when combined with serious conservation efforts and changes to consumption patterns. Additionally, having a diversified pool of energy sources seems like a better approach to self-reliance and sustainability, allowing each to be used for its optimal purpose and spreading the energy dependency out among many reproducible sources.

Besides the types of energy we use, it is also critical to address who and where we get our energy from. This means the issues of transmission and distribution, the areas currently ignored by deregulation. Because of this, the community is left to the major vulnerabilities of the conventional power grid, which was recently crippled in the Great Northeast Power Blackout of 2003, where 21 power plants were shutdown in three minutes and dozens of major cities in the U.S. and Canada were left in the dark. By further decentralizing the energy infrastructure, we can reduce the threat of shortages, blackouts, and pipe ruptures.

To increase self-reliance and sustainability, the community should expand local production and local control of the energy infrastructure. Were the community to develop its own power plant as a community corporation, it would be less dependent on the regular grid. This could also ensure that the energy generated uses renewable resources as much as possible; when Green Mountain Energy was offering its products to PA consumers, there were concerns over the company's ownership and operation, something better monitored with local scrutiny. Such a model could also extend to the distribution end of energy production, which would further ensure local control. Producing electricity closer to the community also saves power. When electricity is produced in fewer locations, it requires large numbers of high-voltage transmission lines to move it from the power plant to consumers. Much of this energy is wasted as it travels over long distances, usually escaping as heat.

While decentralization of the national grid by expanding local energy production makes sense, further decentralization might even be more economically feasible than building a large local power plant. **To do this, the city should consider using district combined heat and power (CHP) plants, which provide efficient heating and electricity production to the neighborhoods in our community.** Besides bringing the production of energy closer to consumers, CHP plants also operate more efficiently by combining production processes where it makes sense. Using a thermodynamic process called cogeneration, electricity is generated using the steam from boiling water, which—instead of being wasted—is then pumped into connected buildings both for plumbing and radiant heat. To add further redundancy to a district system, individual buildings could be equipped with backup or supplemental heating and electrical systems powered by solar and biomass sources.

Such efforts are excellent investment opportunities. If the city were to establish a district cogeneration plant that was powered by biomass/biodiesel, an immediate need for a renewable energy business cluster would develop. And as the cost of energy continues to rise (even if price supports lower the price of oil temporarily), the savings of the district system should help it pay for itself. Once the first plant is up and running successfully, other sections of the city could begin plans to install district systems in their neighborhoods, eventually linking them together to form a community-wide power grid fueled by biofuel from neighboring farmland. If our efforts of conservation and local production through renewable energy are done right, the city could end up producing a net surplus of energy and begin selling it back to the utilities. Revenues can then be used to further advance our energy independence.

Beyond shifting to more sustainable energy production and consumption methods, Reading must also play a further role in influencing U.S. attitudes towards the issue of climate change. Although the official position of the federal government is to reject the proposals of the Kyoto Protocols, which seek to reduce the amount of greenhouse gases produced by both the developed and the developing world, innovative state and local governments are taking the lead to do their part anyhow. One of the most comprehensive efforts is the Chicago Climate Exchange, which developed an internal carbon trading system to help manage greenhouse gas emissions. If enough urban centers participate or produce their own solutions (and become successful), the federal government will no longer be able to ignore this critical issue.

As a good start, Reading should institute a climate neutral bonding policy. Such a resolution would require that the city's bonded projects prevent any net increase in global warming pollutants within the community. This will provide a mandate for more sustainable building design and energy use, carbon sequestration efforts such as reforestation, and perhaps expand into a local carbon offset trading program. While such efforts may seem insignificant in the face of such global challenges, our stewardship can lead many other communities to action.

Water Supply

Even more important than energy, our community's water supply is also largely taken for granted. Besides the air we breathe, water is the most essential substance for sustaining life and is needed for bodily hydration, growing food, personal hygiene, public health, and most production processes. Because of this, our water infrastructure and supply are fundamental to the city's existence and need to be protected through sustainable practices.

Unfortunately, most people don't understand the issues related to water and the huge effect it has on political, economic, and environmental systems. Like petroleum, many geopolitical struggles and wars have been waged over rights to the Earth's 1% of accessible fresh water, especially in areas of widespread scarcity such as Africa and the Middle East. Even in the U.S. there are countless conflicts among states and municipalities over access to regional water supplies. Some cities in the Western U.S., such as Las Vegas and Los Angeles, could only be built because man-made subsidized water supplies were made available. In fact, the only reason why water seems cheap and plentiful is because it is one of the most heavily tax-subsidized resources in the country. This causes it to be used unsustainably and inevitably leads to the three major problems caused by water: contamination, oversupply, and undersupply.

Water supplies can be easily contaminated by synthetic chemicals, nutrients, minerals, pathogens, and other harmful substances. Most types of air pollution released through emissions are absorbed by rainfall and end up in rivers, lakes, streams, and the water table. Many chemicals (which are often toxic) leach into the ground and water supplies from landfills, accidental leaks, and even illegal dumping. Poorly-treated effluent from factories, sewage treatment plants, and other sources are generally dumped back into water supplies, often upstream from another dependent community. Agricultural runoff such as fertilizer, pesticides, herbicides, and even sludge also damage water supplies, and can leave them unfit for consumption or even aquatic life.

Large amounts of water can also cause significant damage. As we recently witnessed in New Orleans, flooding can be one of the most destructive types of natural disasters. This problem isn't just linked to areas along the coast or next to major rivers, either. Because large parts of the land in communities are part of the built environment and have little to no drainage (besides sewers), heavy rains that would be more readily absorbed into the ground often collect on streets and flood low-lying areas and the basements of buildings. Even if the water is drained to the sewers, it may end up inundating an area downstream. Flooding is also worse if much of the vegetation is removed—especially along riverbanks and roads—which can cause erosion and mudslides.

Water shortages are also a major problem. Although occasional droughts can ruin the crops of an entire growing season and reduce the available water table, the largest risk comes from our water use patterns. The rivers, lakes, and aquifers we use as water supplies are being drained faster than they can naturally replenish, largely due to population and land usage increases. And because we perceive water to be cheap, our (often wasteful) consumption continues to increase. Excessive usage also affects vital parts of the environment such as wetlands, forests, streams, mountains, ponds, rivers, and lakes, as well as the plants and animals that live there. Because water supplies are actually networks of all these areas and the water collection, distribution, purification, and storage services they provide, shortages in one could lead to a negative chain reaction among the others.

To make matters worse, global warming and accompanying climate change has potential to shift conditions in entire regions, which would undoubtedly alter water supplies. Some climate change forecasts predict desertification of currently thriving land and major coastal land losses due to rising water levels. The local risks are uncertain, but there is plenty of reason for concern.

Regardless of what the future holds, our community already faces plenty of existing problems with the current water supply. Concerns continue to mount over rising contamination of both Lake Ontelaunee and the Maiden Creek watershed from agricultural runoff, phosphorous, and sedimentation. In 2004 the city's sewage treatment plant, Fritz's Island, was charged 20 million dollars in fines—due to repeated chemical leaks—by state and federal regulators and faces an additional multi-million dollar expense in either repairs or total rebuilding. Also, the Reading Water Authority, which is deeply in debt from rising costs, continues to consider risky and unrelated sources of revenue such as from building and operating a golf course. Finally, there is the ongoing issue and irresponsible handling of Antietam lake, where 8 feet of water was mistakenly drained and sale of the property risks both water and land preservation to private development. To address these challenges, we need to approach our water needs like our energy needs above and establish comprehensive sustainability efforts.

Like with energy, we need to develop effective ways to conserve our water supply. The most obvious thing to do is to continue adjusting water and sewage rates to account for more true-cost pricing, as well as establish a "tap-in" fee for residential, industrial, and other water customers to connect to the city's water mains. This will help the Water Authority to balance its budget and prevent the city from having to spend over two million dollars a year from a cash-reserve fund to operate the sewers. With the additional revenue, the city can begin upgrading the 100 year old municipal water infrastructure, including pipes, valves, reservoirs, and storage tanks, each of which could deteriorate and begin leaking significant amounts of water.

These price increases will also encourage cuts to wasteful water usage by customers. To help in this effort, local Water-Efficiency Service Companies (WASCOs) can design and implement efficient and cost saving solutions. Buildings can be retrofitted with low-flow shower and faucet heads, low-flush toilets, and high-efficiency clothing and dish washers. Industrial processes can be reengineered to conserve and recycle water, reducing or eliminating the need to draw fresh water or discharge effluent into the environment. Agricultural processes, which account for almost 80% of all water use, can also be reengineered to use drip irrigation and prevent runoff.

Besides simply preserving the water supply, conservation will reduce the strain on the city's sewage treatment plant, which is terribly outdated and in need of being replaced. Besides the dirty discharges, the plant is notorious for the noxious odor that can often be smelled several miles from the facility. But because the city is struggling to afford operation of the existing facility, the cost of replacement is currently impossible to consider. Because of this, the city needs to tackle the sewage problem at its source: inside the homes and buildings in the city and other contributing communities.

To reduce the total amount of wastewater coming into the Fritz's Island, the city must decentralize water treatment through the development a major wastewater recycling initiative. Wastewater is divided into two general types: greywater and blackwater. This distinction helps us determine how these wastewaters should be managed and treated, and allows us to develop more efficient and effective ways of handling them. Greywater is essentially "wash water" from sinks, tubs, and laundry, while black water is water mixed with human and food wastes. Greywater is significantly different from blackwater, and should therefore be treated as such. It contains only 10% of wastewater's nitrogen concentrations, which is the one of the most serious and difficult-to-remove pollutants affecting our water supply. It also contains a significantly lower amount of pathogens, which exist largely in fecal matter of blackwater. Additionally, greywater pollutants decompose much faster than those in blackwater, which allow it to be reused more quickly or sent directly back to the groundwater supply.

Because of these qualities, greywater can be collected after use, purified, and recycled within domestic water systems. Instead of mixing with blackwater and drained as sewage, greywater sources such as sinks, bathtubs, and clothing and dish washing machines are routed to the building's purification system. When purified, the water can be reused in toilets, for watering the garden, and if the purification process is effective enough, washing clothing and dishes. This reduces the amount of wastewater sent to treatment facilities and also conserves potable water supplies. It makes little sense to use drinking water to flush the toilet or in the yard. While some "hard" purification systems use more artificial and energy intensive methods like distillation, greywater purification is usually done using "soft" and natural methods such as reedbed filters, wetparks, and living walls. The reedbed filter and wetpark methods operate in outdoor configurations so aren't very applicable in urban environments. Living walls, on the other hand, are both effective greywater purifiers and excellent additions to the urban environment.

In a living wall, greywater is continually pumped onto a vertical garden of plants and porous material. As it percolates down the wall, it nourishes plants such as moss, vines, and flowering plants, who absorb the nutrients and dissolved materials. Gravel, sand, vermiculite, and other porous materials catch sediment, and bacteria break down particulate materials for the plants. Some living walls even house insects, fish, and amphibians; others are used to also grow food. When used indoors, they often function as terrariums in glass containments. When used this way, they can also help purify the air. Besides adding oxygen, bacteria in the plant roots metabolize airborne impurities such as volatile organic compounds (VOCs), which are emitted from many types of furniture, synthetic chemicals, and building materials. Living walls can be connected to the ventilation system, treating the air and reducing "sick building" syndrome. Because of their vertical design, they can enhance any area with their natural beauty in addition to air and water purification service. When used outdoors, they can be placed on sunny sides of buildings to help keep the interior cool.

Blackwater can and should also be recycled. Believe it or not, toilet waste—deemed "humanure" —is a valuable resource that can be composted in a safe and sanitary manner. Instead of a toilet that simply flushes wastes down the drain, such a system composts this waste on site either within the toilet unit itself or in a central composting unit stored in the basement. Urine is actually an excellent odor- and pathogen-free plant fertilizer after the composting process of nitrification, and some toilets even separate solid and liquid wastes for this purpose. The composting process mixes blackwater with a medium such as sawdust (and perhaps enzymes), and is automatically rotated inside a drum. The natural process of composting heats the waste to a temperature proven to kill worms, viruses, microbes, and other pathogens, and results in an incredibly rich humus that can be used for all agricultural purposes.

Composting toilets are versatile choices for all community needs. They are ideal for areas without plumbing or power, and can even be installed in large facilities such as schools and office buildings. Although significant resistance to such an idea is always bound to happen, such a practice is essential to local sustainability. While people might be concerned about composting humanure, raw sewage sludge is already being used for agricultural purposes. Composting is the safe and more effective alternative to sludge; sludge fertilizer is a dangerous practice that should be outlawed, but the use of composted waste should be encouraged. In addition to producing valuable soil, composted waste has no need for sewage treatment, which can dramatically reduce the community's sewage effluent.

To encourage adoption of these conservation practices, the city and water authority could provide "feebates" for people investing in grey- and blackwater systems. A feebate approach charges normal consumers an increased fee for the usage of something, and then passes it on as savings in the form of rebates or lower rates to those who adopt the alternative approach. If done properly, this could create a market for WASCO products and services, which would create jobs and stimulate industry while saving tax money and conserving the water supply.

Although these grey- and blackwater recycling efforts can significantly reduce sewage output, there will always be a need for centralized sewage treatment facilities. **Instead of a large, high-tech, and ultimately expensive new plant, the city should implement a constructed wetland water treatment system.** Three times less expensive to build and operate, and arguably more effective, a wetland uses natural processes called bioremediation to store, filtrate, and purify sewage before sending it back into the water supply. Sludge is processed through a bio-active sedimentation process that removes heavy metals and other major pollutants, and after digestion can be used as bio-mull, a type of fertilizer. Wastewater then travels through a series of basins, weirs, and streams, being further polished after each step. Plants and other organisms such as bacteria break down, absorb, and disperse materials and dissolved nutrients such as nitrogen and phosphorous, while the natural sedimentation process reduces the amount of remaining suspended particles. By time the water reaches the river, it should be clean enough to swim in.

A wetland was already proposed as part of the sewage plant settlement, and is to be established in the damaged area that used to be Angelica lake. Converting it to a water treatment area makes perfect sense, and addresses both needs in the most effective manner. Besides treating water, the wetlands would become a major natural habitat and could serve as an excellent educational facility as a complement to the nearby Nolde forest. Once successfully completed, it could also serve as a model for other municipalities to address both water treatment and restoration of a vital type of ecosystem.

But while these conservation efforts can help maintain an adequate water supply, they can't prevent a sudden water shortage. **To address this risk, a distributed city-wide rainwater catchment and storage system should be used to maintain a supplemental and emergency water supply.** Such a solution provides several important benefits. First, it decreases demand—and thus dependency—on the water shed, which is critical in the case of natural disasters or fire. Second, it provides a low-cost source of water often superior to groundwater; when filtered, rainwater produces a high-quality soft water with a low mineral content that is much cheaper than bottled water. Third, capturing rainwater reduces the amount of erosion and runoff that often damages cultivated land and pollutes our oceans, rivers, and lakes. Lastly, it reduces the amount of runoff after a storm, which allows the groundwater table to recharge by giving the earth an opportunity to actually absorb the water that has fallen.

To capture water, buildings and other structures efficiently collect rain as it drains off of roofs or paved areas. This water is then directed into a filtration system and storage tanks where it is available for use in domestic water systems for residential, commercial, and agricultural needs. Although it can serve as a potable source, rainwater is typically used for almost every other water need. As a soft water, it is exceptionally effective for all cleaning purposes. Additionally, rainwater is much better than groundwater for agricultural purposes, as plants are more accustomed to it.

Food Supply

Agriculture is still Pennsylvania's top industry, and Berks has a long, rich farming heritage. Based on 2002 data from the USDA's Census on Agriculture, Berks is the fourth-largest farming county behind Lancaster, Chester, and York with 1,791 farms. It is the third-largest in sales, bringing in almost $300 million annually. Yet despite their importance to both local culture and the economy, our farms and other agricultural resources are in serious trouble, as local family farms are finding it harder to compete in today's food market.

Instead of being locally grown, almost all of the food we consume comes from other parts of the country (or abroad), often covering over a thousand miles before it finally reaches our plates. This requires a significant amount of energy for production, storage, and transportation, all derived unsustainably from fossil fuels. Such a process also creates a large number of intermediate transactions between the farmer and the consumer, raising the final cost of the product but reducing the farmers' share of the revenue as middlemen control and disproportionately profit from the food market. These production and distribution methods are wasteful in other ways, requiring a large amount of throw-away packaging and causing almost a third of the food to spoil even before being purchased. The processing methods also contribute to poor health through the use of low-quality ingredients, artificial preservatives and flavorings, and reduced nutrition when compared to whole foods.

Much of this food is grown and processed by what's called "factory farms" and large "agribusiness" conglomerates. These operations are widely known for their unsustainable agricultural practices that strip nutrients from the soil, which can permanently damage fertile farmland that was originally cultivated for generations. They also utilize synthetic chemical pesticides and fertilizers that pollute the land, water, air, and food, many of which have been traced to cases of birth defects, infant mortality, cancer, and other serious threats to health. In addition to the use of chemicals, many of these farms are turning to genetically-modified organisms (GMOs) to produce unnaturally optimal crops and livestock without any certainty of the long-term effects both on the environment and our health. Most of these crops and livestock are grown in monocultures, which reduce natural diversity and increase the risk of wide-spread damage of our food supply from disease and changing environmental conditions. Factory farms and agribusiness conglomerates are also notorious for their exploitation of both employees and livestock, completely removing the humanity from farming and converting it into one of the most cruel industries in modern society.

These factors are leading to an alarming deterioration of our rural communities. Family farms are closing down left and right because of the costs to compete, and rural youth are increasingly rejecting careers in farming—which has one of the highest occupation-related suicide rates in the world—for less stressful, more stable, and profitable enterprise elsewhere. Those still willing to work the farms often end up subcontracting to large agribusiness companies, which runs the same risk of corporate mobility as in every other industry. Adding to these pressures is the steady encroachment of sprawl, with developers constantly attempting to buy out farmland from owners who often don't have much choice but to sell.

Combined, these agricultural issues create an unstable supply of food. In order to protect our family farms, rural communities, and natural resources against the threats of factory farming, agribusiness, and sprawl, we need to turn to the principles of self-reliance and sustainability. This requires a focus on agricultural production methods, distribution methods, and financial support options. Such efforts will help to bring our food supply back under local control and protect the vital natural resources that make farming—and our society—possible.

As a first step, we need need to develop and commit to ways of financing local farms, perhaps through extending the Community Supported Agriculture (CSA) model. In a CSA arrangement, a farm sells annual "shares" of its production to consumers at a cost of anywhere from $250-1000. These shares act as "capital outlay" and are used by the farm to help cover operating costs. Once the growing season begins, shareholders stop by the farm each week to pick up a variety of products that usually includes fruits, vegetables, herbs, flowers, milk, eggs, and even firewood—all fresh as possible. The money from shares helps to spread the risks of the growing season around and helps the farm to jumpstart the season with more resources. Some farms also require (or offer discounts for) a small amount of labor from shareholders, giving them the opportunity to learn about and better appreciate how their food is produced and personally contribute to the process.

CSAs could also be reorganized as community corporations to help them run efficiently and protect their long-term viability. Shareholders could become co-owners of the farm and democratically decide how the farm should be operated. Because it is owned by members of the community, it would be managed in the community's interest. This would help prevent it from having to depend on being passed down to the farmer's children to continue its operation and keep it out of the hands of agribusinesses or developers.

These community agricultural corporations could open up new ownership and labor opportunities, especially to minorities. Instead of being exploited as migrant and temporary farm workers, they could begin taking over these operations. **The local CDFI could help finance the farms and provide management oversight and training.** Loans for equipment upgrades and facility renovations could be provided to improve farm productivity, even for small farms typically turned down by major lenders. These local farms could also benefit greatly from a single-payer health care system and crop insurance trust fund.

Local government can further help our farms succeed. The county's commitment to agriculture can be seen in its efforts at farmland preservation, being the best in the state with almost 40,000 acres (20%) of the total farmland already preserved for future generations. **To best support farmland preservation the county and municipalities should enforce stronger agricultural zoning policies, implement the land value tax for all boroughs, and lobby the state to allow the county and townships to implement it also.** As we mentioned above, the LVT is the most effective way to promote rational land use and protect both open spaces and already-developed land from distorted real estate practices that cause rural land to be built over and urban land to lay idle. They should also stop spending public revenues for expanding public infrastructure for private development and lobby the state and federal government to limit any subsidies—which most farms depend on—to sustainable and locally-owned farms. These efforts will significantly reduce the factors leading to sprawl and remove conditions that attract factory farms.

To preserve our agricultural resources and produce the most nutritious food possible, our farms should begin shifting to organic farming practices. Organic foods are grown using sustainable agricultural methods in harmony with nature and without the use of harmful synthetic chemical pesticides and fertilizers. Besides plant crops, animal livestock and their byproducts such as milk and eggs can also be produced organically, free from inhumane living conditions, steroids, antibiotics, and unhealthy feed sources. No longer a niche industry, organic products are showing up in stores next to common brands, often at competitive prices.

Organic agriculture must play an important role in the goals of self-reliance and sustainability. Besides protecting our bodies and the environment from the harmful use of experimental genetically engineered species (which could mutate, mix with natural species, and contaminate the local ecosystem), antibiotics (which can strengthen strains of diseases that could be passed to other species and even humans), and growth hormones (which can cause cancer and developmental disorders in humans), organic farming protects ecological biodiversity. As mentioned above, most GMOs are monocultured, meaning they lack the slight adaptations natural species have developed over time in response to environmental conditions. This helps prevent a disease from being able to wipe out a whole species. By using openly-pollinated heirloom and traditionally native species and raising livestock in more healthy and natural conditions, each region has a better chance of withstanding global biological threats such as bird flu and mad cow disease.

Another awful by-product of GMO products is the unfair and unnatural commodification of plant and animal species. A small handful of companies, including Monsanto, Archer Daniels Midland, and ConAgra are in the process of adapting existing species with genetic modifications and patenting the results. One of the best known—and disturbing—examples is the so-called "terminator seed," which must be bought every year from the company because the plant is unable to pollinate naturally. This type of agricultural practice is a serious threat to both self-reliance and sustainability, and should be rejected for any use by the community. **Instead of licensing GMO seeds from foreign companies, our region should develop an organic seed bank to supply farmers and protect the integrity of native species in the event of a major disease outbreak, environmental catastrophe, or climate shift.**

To avoid monoculture crops and livestock, each farm should cultivate a wide variety of plants and animals using homeostatic agricultural methods. Besides ensuring diversification, this approach will also encourage import replacement and expand the county's staple farm products. Additionally, many crops complement each other, bringing up or replacing nutrients within the soil and protecting more vulnerable crops from pests. Many of these methods utilize crop rotation techniques, while some are planted together in the same plot. Animal husbandry and the use of beneficial organisms on farms is also vital to organic methods.

Although learning these new farming techniques, making them work, and making them profitable will certainly be a challenge, some of the best experts on organic farming in the nation are right in our own backyard. The Rodale Institute, located in the heart of rural Berks county, has been operating a 333-acre experimental farm for almost 25 years and studying an organic farming method known as "regenerative farming and gardening." Experts in other approaches such as permaculture and representatives from Pennsylvania Certified Organic (PCO) are also available in the region. With their training and consultation, we can effectively prepare the next generation of sustainable farmers.

Farming is also an excellent industry to begin deploying renewable energy systems. Energy costs eat into agriculture's already narrow profit margins, especially for smaller operations such as nurseries and mushroom farms. In the past few years alone, wildly destabilized oil prices have forced many agricultural businesses—large and small—to close, as the amount of operating costs directed to energy expenses made the few remaining revenues not worth continuing. By leaving our farms to the rapid fluctuations of the global energy market, no amount of additional assistance may be able to keep them profitably operating.

Besides growing "energy crops" for biofuel, farms can begin utilizing these sources to power their operations. Many farms are struggling with the instability of fuel prices, and nothing could be better than turning farms into a self-powered energy supply. Most farm equipment can be fueled with biodiesel, and biomass, solar, and wind power can meet heat and electrical needs of greenhouses, irrigation systems, and farm buildings. Combined with modern equipment and facilities, farms can harness renewable energy to increase productivity, cut long-term costs, and meet local food needs efficiently.

Along with an effective and sustainable food production network, we need to develop distribution and consumption patterns to support it. The market demand for locally-grown food products already exists, with grocery store chains advertising such items and the state-wide groups including the Pennsylvania Association for Sustainable Agriculture promoting it's "Buy Fresh, Buy Local" campaign. Additional infrastructure is already in place to assist in our efforts, with an organization named Food Routes based in Millheim, PA that provides advocacy resources, implementation programs and toolkits, and a network of producers and consumers to connect with.

Although some people enjoy going to the farm as part of a CSA and picking up their food, many people are used to and find it more convenient to shop at a store. **Because of this, we need to expand the availability of organic and locally-produced food in food stores.** Large chain stores including Giant, Weis, and Redners should be lobbied to better support locally-produced foods, giving them the prominence usually reserved for goods that pay shelf slotting fees. In addition, new small-scale community grocery stores similar to the many corner stores scattered around the city can be established to cater to such consumer demands. Such a model might be better anyhow; by putting small stores in each neighborhood, we'll be able to supply the community with readily accessible, high-quality, and affordable food products, something often missing from today's urban economy. These stores could also be more responsive to the growing diversity of the city, offering a more accurate range of ethnic products such as those present in Latino, Asian, Indian, and Middle Eastern cultures, all things generally not available in supermarkets that focus on national brands.

The city should also seriously consider bringing back a farmers' market, which is perhaps the best way to directly connect producers and consumers. With one recently burned down and another closed for many years, Reading is missing out on an excellent venue for a wide range of small businesses, including fruit and produce stands, bakeries, florists, craft-makers, artists, and ethnic food stands. Several neighboring cities, including York and Lancaster, continue to enjoy the social, economic, and even historical value of their farmers' markets, and Reading should look to their success in deciding whether to revive this important local asset.

Another interesting option would be a food delivery service designed to deliver local goods. Similar to the days of the milkman, such a service could offer to bring food fresh from the farm right to your fridge. Because grocery stores can be expensive to stock and operate, perhaps a smaller-scale operation devoted solely to the local food market would be a better approach as a business model. This option could also appeal to those without the time, energy, and patience to spend time traveling to and searching throughout modern grocery stores, with their increasing distance away from neighborhoods, terrible traffic, and more choices than most people want to deal with when shopping.

Such subscription-based services already are operating, such as the Schwan company, which for over 50 years has been delivering frozen desserts, meats, and even whole meals, all ready to order. Newer companies such as Peapod and Fresh Direct offer interesting models that take advantage of the power of e-commerce to allow their customers to shop online, and could be recreated as local community corporations and provide such services. By partnering with local grocery stores and food processors and distributors, such companies may be able to effectively meet all the food delivery needs of local households and businesses.

At the same time, people will always enjoying going out to eat, and restaurants should support the local food network by purchasing and using local food in their meals. These efforts could be supported with the establishment of a "Buy Fresh, Buy Local" campaign, which could develop promotional materials and programs and assist restaurants in finding suppliers that meet their needs. Restaurants and their suppliers that support local food could be listed in a directory and display "Local Farm Supporter" signs in their windows and on their ads. Competitions could be held annually—or even every season—to produce entire meals and desserts using local food sources, and these award-winning recipes could be proudly displayed on restaurant menus.

Food service, processing, and delivery companies that serve schools, hospitals, seniors, catering needs, and business cafeterias can also become important parts of the local food network. Many organizations currently outsource their food service operations to global corporations such as Aramark and Sydexho, which removes a significant amount of control over food decisions from the community. This provides another opportunity for a community corporation to provide such services and bring them back into the local economy.

Such companies could be more supportive of the local food network and provide more nutritious and affordable options to clients. This is especially true in schools, which have some of the poorest food choices possible and are even beginning to allow fast food chains to operate in their cafeterias. Here in Reading, many students come from poor families and what they receive at school is probably their most complete meal of the day. Studies continue to explore the importance of high-quality meals for children and their relation to the students' growth, health, and ability to learn and perform.[33] Addressing this problem, which also applies to many others that rely on food service, is critical to keeping our community well-fed, healthy, and productive.

Land Management

Land is valuable because it is the natural source of all wealth, but land also has more intrinsic value because it is a location—one where we live in our homes, work in businesses and other organizations, participate in social institutions, and enjoy time outdoors. For this reason, the preference of where we live is highly dependent on the quality of the land and what it can offer our lives. On a technical level, a city—or any community of any size—is simply a span of land where people decide to invest their time and spend their lives together. To make a community great then, the land must be carefully managed to ensure it is a place where people will want to be and that it effectively provides for peoples' needs.

Let's think about what features make Reading a place where people would want to be. Tucked between a river and high hills, its natural geography makes it an excellent location. It has a comfortable climate, good sources of water, fertile soil, significant mineral deposits, and healthy forests. The city's proximity to major metropolitan areas such as Philadelphia, Washington D.C., Baltimore, and Pittsburgh is an important strategic advantage. With a size of ten square miles and

33 Many students come to school without any breakfast, which reduces their energy levels, ability to concentrate, and overall health.

a population of just over 80,000, it is large enough to support major enterprise and require significant infrastructure, yet small enough to preserve a certain "home-town" quality of character.

Although these important benefits could be used to promote the city as an attractive place to open a business or raise a family, the city still suffers from a severely negative image and reputation. Many people outside the city balk at the idea of going in, and even many residents living in Reading don't enjoy where they live. These perceptions and attitudes are largely based on the city's terrible crime rate, which recently gained national attention for being the most dangerous city in Pennsylvania and ranking 5th in the country for the high number of homicides, violence, theft, and drug activity per-capita. A sad yet telling indication of the city's reputation are the red bumper stickers that read "Pray for me, I work in Reading."

Deeply connected to crime is the challenge of urban blight; because the city's economy has continued to sink for several decades, the housing stock became badly deteriorated, many residents moved away (dropping from almost 120,000 to 80,000 people), homeownership shrank, property values declined severely (by almost 50%), abandoned homes and factories littered neighborhoods, and poverty, slums, and crime took hold. Many once thriving neighborhoods are now comprised of neglected rental properties, abandoned buildings, empty lots, and the run-down homes of retired seniors and poor or lower-middle working class residents. These conditions are tightly connected to some of our most urgent problems, so understanding their root causes and applying the proper solutions is essential in reversing the trends.

While revitalization of the city's center is important, including the expansion of RACC's campus, the GoggleWorks center, the Sovereign centers, the RiverPlace project, and the ICGR's corridor project, we must make rebuilding the neighborhoods an equal or even greater priority. For while an urban core provides many vital functions, no city can thrive without healthy neighborhoods. These homes and businesses are the economic and social foundation of community life, and without which a community has little purpose. It is in these neighborhoods that most problems start, and into the neighborhoods we must go to solve them.

One of the biggest source of problems comes from the unhealthy amount of rental properties in the city, believed to comprise over 60% of the housing stock. Many of these properties are owned by absentee landlords (many residing out-of-state), who quickly bought them from sellers eager to move out of the city and carved them up into multiple units. Oftentimes these landlords are interested in little more than collecting rents, allowing their properties to deteriorate and otherwise ignoring the growing number of trouble tenants responsible for everything from trash accumulation to illegal drug activity. Because most of the tenants living in these apartments are poor and low-income, they are either uninterested in or unable to maintain the property, with the negative effects of this neglect falling heavily upon the surrounding neighborhood.

The other side of this imbalance is a decreasing number of homeowners. As mentioned above, many people moved out of the city because of the weakened economy, and those that remained began leaving as slums developed, crime worsened, and property values sank. Many homes are also going empty as the seniors that own them pass away or move to retirement and managed-care communities. Although these circumstances are obviously a large contributor to the rise of rental properties, a lack of a strong majority of homeowners also adversely affects the civic underpinnings of neighborhoods. Homeowners are more likely to invest in their property, the surrounding neighborhood, and the community at-large, whereas many rental tenants often never live somewhere long enough to feel established and make such long-term commitments.

Another related problem is the large number of empty buildings and vacant lots. This includes the hundreds of abandoned homes in every neighborhood, old factories, industrial brownfields, and once-thriving real-estate such as the Reading Outlet Center. Every square foot of this type of property is still owned, but by someone who is failing to maintain it for productive use to the detriment of the entire city. Besides prevented from being converted into homes, businesses, and any number of useful purposes, these buildings and lots pull down the value of surrounding properties, reduce the available amount of government revenue, and attract trash dumping and crime.

Together, these factors are major contributors to the conditions that lead to urban blight, often as part of a vicious cycle:

1. Homeowners decide to leave the city, desiring a location with better jobs, safer neighborhoods, better schools, and higher property values. Afraid to lose more value or simply eager to leave, they often end up selling to landowners that rent out property.

2. Because the landlord is usually able to sustain tenants without reinvesting in the property, little is done to maintain it and the only concern becomes collecting rent. The property deteriorates from the wear and neglect of rental use, reducing its value and pulling down the value of neighboring properties, which might also be physically damaged from leaking roofs, weakening building structures, and fire from poor electrical and heating systems.

3. The quality of tenants tends to decline along with the condition of the property, increasing the potential for disruptive behavior, litter and trash dumping, and drugs and other criminal activity. Many of these offenses are ignored by the landlord, and instead must be dealt with by other residents and law enforcement.

4. If the apartment building becomes so badly deteriorated that it violates city code and becomes condemned, the landlord may simply attempt to sell it instead of paying for the costly repairs. If she or he cannot get the price they want, they may simply let it sit, speculating on the nearby property values to rise before selling. In the meantime, the empty building may suffer additional damage from deterioration and vandalism. After reaching this point, it becomes unsellable, boarded up and abandoned—often for many years.

5. As conditions continue to worsen, more homeowners in the neighborhood are forced to sell their home, potentially to an absentee landlord.

It is important to remember that slums don't begin as slums; almost every slum in the city was once a thriving neighborhood, and almost any neighborhood can become a slum. It is a process that has been happening for decades, house by house, neighborhood by neighborhood, until it recently reached the severe levels affecting the entire city today. To slow down and reverse these conditions, we must immediately enact aggressive mechanisms to break out of the urban blight cycle for good.

A simple way to begin improving our neighborhoods is by rebuilding their physical appearance through community beautification efforts. Litter, abandoned vehicles and buildings, and other forms of blight have a significant impact on the community, as explained by the "broken window" theory. First, they project a negative image of the area, encouraging further deterioration and social disorder. Second, they depress the property values and discourage outside investment. Third, they pose a serious threat to public health, as litter, illegal dumping, and dilapidation can introduce rodent and insect pests (including the pathogens they often carry) and expose the residents to toxic contaminants (oil, chemicals) or dangerous items (glass, metals, used drug paraphernalia).

To address these issues, neighborhoods should take active steps to clean up their areas and work to prevent further deterioration. Besides providing immediate improvements to the neighborhoods, these activities will help the residents reestablish pride, satisfaction, and accomplishment in the area they live. Such an effort is an excellent opportunity for the neighborhood councils to coordinate, and can possibly revive and expand upon the existing Neighborhood Design Initiative, which was developed to empower residents in the planning and redevelopment of their own neighborhoods.

To get started, an assessment of where litter and blight are accumulating should be done, along with estimated needs for improvements. Initial and on-going cleanup events should be carried out on a regular basis, as large annual cleanup events—while positive initiatives—often do little in the long run. These efforts should help send a message to others in the areas; once people see others attempting to improve conditions, they tend to feel obligated to help—or at least not hinder—the process. Local businesses and civic organizations could sponsor "adopt-a-spots," assuring the area is maintained. Neighborhood watches could be strengthened to help monitor local activities and identify offenders.

On the city level, government groups such as Reading Beautification and the Department of Public Works should play a major role in these efforts. Each block should have several public trash and recycling receptacles, and the streets should be cleaned on a regular basis. The Mayor recently announced that his administration will be aggressively enforcing "broken window" ordinances, and with quick responses and follow-ups, residents and neighborhood watch groups will be more likely to report offenses.

Once cleaned up, these areas could be made more attractive and livable through other small but significant improvements. Artistic and cultural expressions should be encouraged to add character and uniqueness to the neighborhood's identity. Parks and playgrounds should be restored, making them safe and enjoyable places for children and families to gather and interact. Open spaces and unused lots could be converted into community gardens and small-scale urban farming projects. Night time lighting can be utilized to make an area inviting but also discourage crime. Also, there aren't more simple but effective things to do to a street then line it with sitting areas, potted plants, flowering gardens, and shade trees. Neighborhoods with the best annual results could be entitled to improvement grants and award recognition, spurring friendly community competition. Support for these improvements from City Hall can already be seen in the Mayor's new matching grants program for community groups.

Besides keeping building exteriors, streets, and open spaces clean and safe, more must be done to enforce the Building Code. These regulations are essential to preserving quality of life in the built environment, covering all aspects of structural safety, sanitation, health, and comfort. Besides new construction projects, it also establishes local requirements for existing property maintenance, as well as enforcement of nuisance ordinances. Some specific examples of things covered under the code include construction activity; wiring, plumbing, and HVAC/R regulations; improper trash storage or dumping; exterior maintenance; residential occupancy limits and rental tenant complaints; problems related to abandoned properties and vehicles; and graffiti and other public nuisances. Those who are caught or reported for violating the code are issued warnings and fines, and if they fail to meet compliance within several months are taken to a district court.

For many years, the city has been unable to effectively enforce the code, allowing the spread of blight into many once thriving neighborhoods. Instead of going out to inspect properties for violations, the department would simply wait for complaint calls to come in. If a follow-up did actually occur, oftentimes the department would lose the case in front of a district justice due to procedural errors and being unprepared. With a lack of progress, many citizens stopped reporting violations and violators increasingly got away with letting their properties deteriorate.

In 2005, the city administration made a commitment to aggressively enforce the code and began by overhauling the department. A new director was installed, more inspectors were hired, certification requirements for inspectors were raised, and greater responsibilities and accountability were assigned. Instead of waiting for complaints, a number of daily inspections must be made, including “code sweeps” of known problem areas. Inspectors are also being equipped with cameras and laptops to build accurate cases, and are being trained on how to win against violators in court. Additionally, council voted in October of 2005 to adopt the 2003 version of the International Property Maintenance Code as the new standard to be enforced.

Although it will be several years before the overhaul is complete, new policies are already being enacted to utilize these updated resources. One of the biggest new programs are the Pre-settlement Review (PSR) inspections, which requires all property transferred or sold within city limits to be checked for code violations. Although it will become an important tool, it has been met with opposition from some residents and property owners, who are currently in court with the city over petitions that seek to put the PSR ordinance on the ballot for a referendum.

One of the opponents’ main complaints with the PSRs is that if the property failed during the initial review by a private inspector, an additional inspection by the city would be necessary. The frustrations over multiple inspection fees and additional time and complication during real-estate transactions are understandable. To address this, city council attempted to streamline the process by having the city do the initial inspection and a one-time free re-inspection, if necessary. The new change will go into effect in March of 2006.

This might not be enough to win back public support for the PSRs, however. The city should better promote the benefits of the policy in its ability to reduce code violations and the resulting blight. Additionally, city council should scale back the cost of the real estate transfer tax, with the eventual goal of eliminating this nuisance tax. Doing so should satisfy those involved in dealing real estate and might actually help encourage unproductive owners to sell and productive buyers to purchase city property. We'll discuss ways to shift off of this tax onto more stable and effective sources of public revenue below.

Besides PSRs, Reading should consider adopting the recent legislation passed in Philadelphia for inspecting apartments as well. Titled the Rental Suitability Bill, it requires all newly-leased properties to have undergone a recent inspection and be certified free of code violations. Landlords would also be required to notify tenants of their right to get a free inspection of their unit by the city. Because a majority of city residents are in rental units, having more mechanisms to enforce the code in these buildings will protect the largest amount of the housing stock, increase these often older and low-income citizens' quality of life, and penalize bad landlords while preventing them from retaliating against tenants over reporting violations.

In addition to encouraging neighborhood improvements and enforcing property codes, the city must make the real estate market itself more responsive, rewarding productive uses and pressuring against unproductive uses of the land. **The most effective market-based way to eliminate the problems of vacant properties, poor land use, speculation, and the resulting blight is to shift all city property taxes (including municipal and school taxes) to the land value structure.** By taxing the value of land as opposed to the buildings that exist there, we'll have multiple benefits of more than sufficient sources of public finance, the recapture of this revenue when spent for public services, incentives for major building improvements, an end to poor land use, increases in employment and business activity, rapid economic recovery, and the prevention of having land used as a speculative commodity. Such a reform sounds too good to be true, but hundreds of empirical studies confirm these claims.

Consider four similar (yet all hypothetical) properties in the same neighborhood, which we'll name A, B, C, and D. We'll use these four properties to explore how our current property tax is actually counterproductive to neighborhood revitalization. Property A is owned by a productive citizen who has spent many years investing in their property's upkeep. Property B is owned by someone in New York City, who has been renting (but hardly maintaining) the property for 12 years. Property C is an abandoned, boarded up house owned by a local landlord who cannot afford to repair it, and since the city's real estate market is on a slow but steady upswing, plans to sell after the market rises. Property D is an empty lot left after a fire destroyed the house, with the owner having collected the insurance payout and skipped town.

Based on their condition, each of these properties has either been helping or hurting the city, and we'll look at these effects from three different standpoints: how did they help or hurt progress during the past decade, how (if they remain the same) will they help or hurt now, and how (if using a land value tax) things could change in the next decade. To evaluate this, let's first review their current value and taxes. Right now, property values are assessed based on the combined value of both buildings and the land they occupy. In this case, we say that they are "evenly taxed" at the current city property tax rate of 10.4 mills.[34] In such a case, the assessed property value and the resulting property tax for our examples would be as follows:

34 Not included is the separate school property tax of 19.25 mills, which should also shift to land values in the same manner.

	Property A	Property B	Property C	Property D
Assessed Property Value	$80,000	$64,000	$30,000	$12,000
Resulting Property Tax	$832.00	$665.60	$312.00	$124.80

Table 2: Current Property Value Assessment and Taxes

As you can see from the table, there is a significant difference in the value (and resulting assessment) based on the quality of the property. The better condition the property is in, the higher the assessment (and resulting tax revenues). In general, these four properties can be categorized as the "good," the "bad," and the "ugly." Let's look at their contributions over the past decade.

Property A is a good property. The owners take pride in their home, frequently renovating the interior and exterior, repairing any deterioration, maintaining the front and back yards, and keeping the sidewalk and curb clean and safe. Also active in the neighborhood, they participate in the neighborhood watch and neighborhood council, showing a strong concern for their community and the well-being of their neighbors. Their efforts certainly pay positive dividends, too: investing in their home and neighborhood builds increased value for them, increases the quality and value of the other properties in the neighborhood, and provides higher tax revenue for the city.

Property B is considered a bad property; although it's being productively used, it is in poor ways that are negatively affecting the neighborhood. The owner isn't very responsible about the condition of the property, which needs constant maintenance due to its age. The exterior is in bad shape, with peeling paint, crumbling steps, a sagging porch, a leaking roof, and a yard filled with litter and weeds. The interior is just as bad, with old wiring, poor plumbing, water damage, and general wear. Each of the two units are rented out to low-income tenants (often with youth), who seem to only stay for 2 or 3 years and rarely are active in neighborhood affairs. There have been numerous complaints about the property, including noise, trash, and reports of drug activity. A long-time neighbor moved out because of the problems, which culminated with a water leak that was traced to property B's roof and hadn't been fixed in a year. Because the owner lives out of state and only saw a photo of the property when he first bought it, there is little connection to the condition of the property and neighborhood, and the only concern is receiving rents on time. This owner also has over 10 other properties in similar condition in other areas of the city.

Property C is literally an ugly property. A run-down apartment like property B for many years, the problems grew so bad that it became uninhabitable. Although the landlord originally planned on restoring it, the money never materialized so the property sat. In the several years that followed, weather and vandalism continued to damage the exterior, trash was dumped in the yard, and there were reports of drug activity inside, forcing the owner to board it up. Besides being an eyesore, the vacant property seemed to encourage an increase in vandalism and crime. As the trash piled up, pests like mice, rats, and roaches began to appear. Because of the problems and sharp drop in local property values, several more homeowners in the neighborhood decided to sell. Due to her negligence, the owner has lost tens of thousands of dollars on the property, so rather than sell it, decides to let it sit and wait until the next real-estate market boom.

Property D is also an ugly property. After a fire destroyed the house, the owners saw little reason to remain in the neighborhood (especially with the problems created by properties B and C).

After the debris was cleared, all that remained was an empty lot. Because there seemed to be little demand for new residential construction in the city, especially on a single property, the lot became vacant. Shortly after, trash and tire dumping became a constant problem and a neighbor's old car began to sit in the rear of the lot. Now in this condition for almost 5 years, the property is practically useless, undesirable to buyers, and its apparent low value yields little revenue to the city in taxes.

Let's think about all this for a moment. Can you imagine which properties helped and which hurt the condition of the city over the past decade? Which properties should be rewarded for their condition, and which should be penalized? Which types of properties would you want in your neighborhood? Which types of these properties actually are in your neighborhood?

Now let's consider the present. There seems to be a growing movement to revitalize the city, and the benefits of this activity can already be seen. Downtown is making a comeback, with the Sovereign centers, GoggleWorks, RACC's new building projects, businesses considering staying open later, the RiverPlace's plan to restore the waterfront, and ICGR's plan to strengthen the Penn Avenue to Penn Street corridor. City Hall is getting tough on crime and blight. Perhaps implementation of many of the recommendations in this paper are also underway. Due to these efforts, the real estate market is responding with more "SOLD" signs and rising property values. What kind of changes might we expect with our four properties?

Property A's direction is uncertain at this point, which is not good for the city. Although conditions look like they might get better, this has happened before and failed (with the neighborhood getting worse each time). In the past decade, more properties in the neighborhood have become rentals, and blight and crime have hurt the owner's investment in their property significantly. Their family doesn't feel as safe anymore, and many neighborhood friends have left because of the problems. There doesn't seem to be much incentive to continue improving the home if the neighborhood doesn't improve. Other neighbors talk about how although more properties are being sold, it's mostly to landlords from out of state looking to make easy money here in the city.

Property B continues to operate as it was, perhaps undergoing a few cosmetic improvements to get the city inspectors off its back. Due to the increase in property value from the community's efforts at reinvesting in and improving the neighborhood, the landlord—who personally did nothing to improve his properties—is able to squeeze more rent from the tenants. One of the tenants was recently evicted because he couldn't afford the higher rent. His low wages weren't rewarded as part of the local boom, and sometimes he thinks about selling drugs—just a little bit, he says—on the side to make ends meet. Now that he's getting kicked out of his apartment, he doesn't know what to do or how he'll be able to keep his new job. He wonders if perhaps he started dealing he wouldn't have to worry about money, could have a better place, and maybe even that car he loves ... seems like everybody's doing it anyways, right? The landlord is seeing dollar signs of his own, and decides to grab up ten more properties in the city, bringing the number owned to 20.

Property C's owner is also seeing dollar signs. In what's now become a gamble too expensive to lose, she is counting on the rising market to deliver a much higher selling price for the property. She read about several similar properties being bought and restored because of their historical value, and thinks that if she plays her cards a little longer—maybe a year or so, she might be able to get another $5,000-10,000 more if the neighborhood keeps improving (although she doesn't plan on spending any time or money contributing to the effort). With the vacant property still on the block, the neighbors are still stuck with the related problems and their home values increase less than in nicer areas, despite their efforts.

Property D isn't in better shape. A vacant lot with weeds, trash, and an abandoned vehicle, the space that could be a family's new home, a shop, or some other productive use continues to lay wasted, weighing down surrounding property values and denying the city coffers well-needed revenue. The owner, who all but forgot about the land until the city tax department tracked him down, is now interested in gaining a substantial profit off the sale of the land and is speculating like the owner of property C. Because the taxes on the land are so low and there is no building to maintain, there is little reason not to hold on to the property until demand peaks and he can cash out. He even heard that because of redevelopment of nearby areas, the value of the land itself has risen significantly, and he sees the property as money in the bank, gaining serious interest.

Although the properties are fictional, these are all very real scenarios of what often happens during economic boom cycles. Because so much personal wealth is tied up in property, it is one of the first things to respond to the change. Our real estate market is so distorted however, that the outcome is often the reverse of the goal. Good property owners may decide to leave town, bad property owners decide to buy up the town, and speculators continue to sit on the fence, further distorting the market. This mismanagement of the land can result in a subsequent economic failures, as happened with redevelopment efforts of the past. If we want to correct our problems of the past and prevent these kinds of problems in the future, we need to foster a real estate market that efficiently rewards good and prevents bad and ugly land management. This can only be done with the land value tax.

As we explained above in the section "Local Taxes," a LVT works to separate the two distinct parts of the property tax: (1) a tax on the value of the land, and (2) a tax on the value of buildings and other improvements on that land. Instead of taxing the two at the same rate, the amount taxed on land increases as the amount taxed on buildings decreases. Eventually, most of the property tax is levied against the value of land, with little or no tax on buildings and other improvements. Let's try to break apart these two concepts and see how they relate to each other.

Land is considered to be owned by the community within which it resides, and any value gained by that land is generally due to the improvements and other activities by the community as a whole, such as streets, sidewalks, waterworks, energy sources, schools, businesses, mass transit stops, police and fire protection, parks, and its proximity to other things in the area. In other words, the value of a piece of land is created by the market demand for it. This is the main reason why the exact same house worth more in one neighborhood can be worth far less in another.[35] Most of these improvements are done as government services paid for by tax money, although the personal contributions made by individuals can also improve (or damage) the value of the community as a whole. This is also why the value of highly developed land in the center of the city will almost always be worth more than less developed land on the edge, and why down-

35 *Time* magazine reported in the November 3, 2003 edition on how the same house worth $121,400 in Binghamton, NY is worth $610,375 in Chicago, IL, and $1,362,375 in La Jolla, California. It isn't the cost of houses which so widely varies across the country, as a building tends to cost the same regardless of where it's built, it's the value of land, based on natural utility, public investment, and market demand, which varies wildly.

towns are usually full of businesses, tall buildings, large institutions, and apartments, and neighborhoods are mainly homes, small shops, and more open spaces. Because of the nature of land and the origin of its value, these improvements and investments should be returned to the community as taxes, not absorbed and lost in the rising value and rent gains of individual properties.

Buildings and improvements to land, on the other hand, just like the labor necessary to create them, are the rightful property of the people that spend the time and money to produce such things. Because the community as a whole had no productive part in the process, taxing these forms of private property is like confiscating personal wealth for the unfair use of others. If a property owner invests $10,000 into her house, the value of her house will rise, but then so will her taxes. That increase in value should remain with the owner, not be taxed away by the community. Likewise, the value created by the million dollars spent by the city to increase the quality of life in the neighborhood should return to the city, not to property owners (especially absentee landlords). A LVT corrects this misallocation of investment value and provides a wide range of additional benefits impossible through current tax schemes.

A LVT is the most fair, neutral, and stable source of public finance, as well as the most effective way to balance government budgets. As we observed above in the section "Local Taxes," taxes on businesses, sales, labor, tourism, people, and other sources only serve to drive these critical foundations of the tax base out of town. Many of these taxes and their rates are arbitrary and recessive, meaning that they are less likely to be based on the "ability to pay" rule of taxation, which also leads to them being highly political. Taxes on commerce such as the business/occupational privilege and sales tax hurt local economic development, one of the biggest requirements for revitalization. Taxes such as those proposed for gambling are highly unstable and political, and as a result require costly administration and oversight. In contrast, taxes on land are simply reclaiming existing value from public investment, are based on free-market activity, cannot be sheltered like income, and—properly done—are highly progressive in regards to ability to pay. And if the government is running a budget deficit, it simply has to tap into the full value of its investment in the land by taxing it at a larger rate instead of going into debt or cutting vital public functions. Because government budgets are generally a small fraction of the total amount of taxable annual value of land in a community, taxing land at a higher rate is the only way to balance the budget without damaging economic growth.[36]

A LVT is also the most fair and often beneficial tax for taxpayers, too. Shifting property taxes by increasing rates on regressive taxes like the sales, income, and per-capita taxes provides no relief at all, as the cost of the tax increases are easily passed back to the taxpayer through higher prices for goods and services, rent hikes, reduced investments, and lower wages, especially for those we need to help most: seniors, the poor, the disabled, and other low- or fixed-income citizens. Taxes on land values, however, cannot be passed along by those on which they fall because of the

36 Based on data from the 2002 Reading LVT study and a 2006 city fiscal report, the total taxable land value for the city is $436,799,100, the projected 2007 city budget is $61,174,036, and the estimated 2007 budget deficit will be $7,062,699. Using a rough calculation of $7,062,699 ÷ $436,799,100, the city would only need to increase the tax on land values 1.6169 mills to meet this deficit. This means that the city is only tapping 14% of its land value, and by raising the tax rate on land enough to balance the budget, only another 1.6% of the total land value would be necessary. Since this community as a whole is the rightful owner of the land value, the land should be the first (and only) source for public financing. Any other tax increase would be detrimental to the progress made during the past few years, and beginning to reduce these other taxes will only accelerate redevelopment.

competitive economic nature of the tax. Besides shifting the tax rate off of improvements such as buildings and onto land, a LVT also shifts the actual tax burden from owners that have invested in and maintained their property in “good” condition, who should actually see their property taxes drop, more evenly to owners of “bad” and “ugly” properties, who—after getting tax breaks long enough—will see their taxes steadily rise with the value of the land, regardless of the poor condition of the buildings.

By pressuring owners to manage their land effectively, we can nearly eliminate the damage done in every corner of the city by blight and speculation. A 2004 study conducted by the University of Pennsylvania’s Fels Institute of Government identified a total of 1,241 buildings and 174 lots determined to be vacant in the city. The report provides an excellent analysis of many factors contributing to the building vacancy problem and will be useful in developing additional solutions, but it unfortunately failed to identify the tax structure as being one of the largest contributors.[37] The city of Harrisburg, once plagued by more than 4,200 vacant structures, now has fewer than 500 thanks largely to their LVT. If the often deadbeat or absentee owners of the many bad and ugly properties are unwilling or unable to utilize their land to its best potential and afford the taxes, then they shouldn’t hold onto it. The financial pressure of higher taxes on these vacant lots will help put them back on the market and ensure the land end up in more productive hands, who could restore any buildings or even knock them down and start fresh.

More properties for sale will also make the real-estate market more competitive, causing properties to become more affordable for use as homes and businesses. This could then trigger a large increase in homeownership, building permits, new businesses, job creation, and other reinvestment which would certainly benefit property values and public revenue. With increased public funds, the city could begin reinvesting in more quality services and infrastructure, which will lead to further property value increases, economic development, and tax base gains. Because better government services and infrastructure only increase the value of the land, having a LVT will ensure this increased value will be efficiently recaptured as compounding tax revenue, instead of being capitalized and absorbed by private land owners.

Combined with reductions in taxes on the productive private activities of commerce, a LVT will actually stimulate further economic development. Like a permanent abatement on improvements (a strategy often used by cities to attract home and business redevelopment), the lower rate on buildings will encourage both new construction and renovations while rewarding compact, vertical, and otherwise efficient use of land. Instead of vacant lots and ground-level parking, we’ll encourage multi-level office complexes and condominiums, which will attract more high-income jobs and residents to the city center. Every building downtown would become premium real-estate, and instead of buildings sitting empty for a decade or longer, the entire length of Penn St. would be in demand. Phasing out the Act 511 taxes will increase Reading’s competitive advantage in recruiting and retaining businesses, especially when combined with the whole host of other incentives presented in Part II. Homes and businesses in neighborhoods will also be encouraged to improve, especially with CDFI financing and attractive tax credits.

To better understand the LVT and its benefits, let’s discuss some of the technical implementation details using our example properties, then consider how this new dynamic could effect our

37 Coincidently, Samuel Fels (the founder of Fels Institute of Government) had a brother named Joseph Fels who was a major leader of the Single Tax (or land value tax) movement in the early 20th century.

revitalization efforts in the near future. In order to move to a LVT, we must separate the value between buildings and land in the city. Unlike other areas of the country, this is done for us in Pennsylvania because state law already requires land and improvements to be separately assessed. The county has an Assessment Registry with each property's land and building values, which municipalities currently tax at the same rate. A property assessed at $65,000 total might have a building value of $55,000 and a land value of $10,000.

With the values of buildings and land split, the next step is to adjust the tax rates as well. Although we use a single city property tax rate of 10.4 mills, this rate is applied to both the building and the land to determine each property's tax bill. Because we want to begin shifting the tax off of buildings and onto land, the tax rate on buildings must be decreased and the tax rate on land must be increased. It is important to slowly phase in the change for the sake of taxpayers who will see an increase, so a common rule-of-thumb is to decrement the building tax rate by 20% and increment the tax rate on land enough to ensure that the shift remains revenue neutral.[38] This shift would then happen annually until we reach the desired rates. Let's apply the first phase of this shift to our example properties:

	Property A	Property B	Property C	Property D
Assessed Building Value	$68,000	$52,000	$18,000	$0
Assessed Land Value	$12,000	$12,000	$12,000	$12,000
Resulting Property Tax	$762.32	$629.20	$346.32	$196.56

Table 3: Building and Land Assessment and Taxes

The first thing you'll notice in Table 3 is that instead of one property value, there is now two: one for the assessed value of the building, and one for the assessed value of the land (because the four properties are on the same block, we assume that the land values are the same). Additionally, instead of simply taxing both at the same rate of 10.4 mills, we'll use similar rates to those originally proposed in 2002: 8.32 mills for buildings and 16.38 for land. This rate will allow us to drop the building rate and tax land at a rate that keeps the total tax revenue neutral with the $1,934.40 levied against the four properties when using the original rates.[39] Notice that the tax on buildings has dropped 2.08 mills (20%) and the tax on land has increased by 5.98 (57.5%). To get the final tax, we calculate the two rates and values separately and add the results together, using the formula

$$\textit{property tax} = ((\textit{building value} \div 1000) \times \textit{building rate}) + ((\textit{land value} \div 1000) \times \textit{land rate})$$

There is another important difference to recognize, as well. By shifting the tax off buildings and onto land, each property saw a change in the final bill. Property A's tax dropped 8.38%, a savings of $69.68. Property B's tax also saw a small drop of 5.47% and a savings of $36.40. Property C gets a tax increase of 11%, adding $34.32 to the tax bill. Most importantly, property D experienced the most significant change, with the tax increasing 57.5% or $71.76. As you can see,

38 A closer examination of the tax ordinances in the city charter is recommended to remove any ambiguities related to the tax shift, particularly in § 907 Appropriation & Revenue Ordinance. An explicit provision adopting a LVT, annual land rate increases, and a cap on building rates (and perhaps other taxes) should also be considered.

39 Of course, we would need to reexamine all city property parcels and the projected city budget to determine the official revenue-neutral rates.

taxing land actually cuts taxes for most productive properties and increases taxes for unproductive ones, shifting the tax burden off our good properties and onto the bad and ugly ones.

One of the original criticisms of this proposal in 2002 was that the changes weren't significant enough to immediately influence good properties to apply for building permits and ugly ones to be sold off, but research from municipalities in PA with a LVT prove the opposite. The market elasticity of supply and demand in response to tax rates is well-documented; in fact, each time city council discusses increasing the tax rates there seem to be more residents, businesses, and workers reconsidering whether to remain in the city, especially when general conditions seem to continually worsen. To better understand the reactions of a property tax shift, Dr. Steven Cord, Professor Emeritus of Indiana University of Pennsylvania and long-time champion of LVT in the state, has collected 237 empirical studies on land value taxation, each with positive results. Here are some of his findings:

- 45 studies show that municipalities adopting LVT see a spurt in new construction and renovations. This includes Allentown, Washington, Connellsville, Clarion, Oil City, and especially Aliquippa, who experienced a 97% increase within three years.
- 63 studies show that these municipalities outperformed their neighboring communities in such redevelopment. In the three years after adopting LVT, Allentown experienced a 32% growth (in dollar value) of construction and restoration activity, 1.8 times more than Bethlehem (who received substantial federal grants in the same time period).
- 83 studies determined that most voters paid less during the revenue neutral building to land tax shift, and in only two the majority experienced a slight increase.
- Since Pittsburgh dropped the LVT in 2001, the city experienced a 19.57% decline in construction and renovation, a 54% increase in the number of property owners paying higher taxes, and a significant increase in overall space-rent for non-landowners.

Because the incentives and long-term effects created by initially moving to a LVT might still be hard to imagine, let's consider what would happen in the subsequent years of shifting the building tax onto land. Each year for the next five years, the building rate would be dropped and the land rate raised to maintain government revenue neutrality. The resulting projected 5-year tax rates can be seen in Table 4.

Year	Bldg. Rate	Land Rate	Property A	Property B	Property C	Property D
2006	10.400	10.400	$832.00	$665.60	$312.00	$124.80
2007	8.320	16.380	$762.32	$629.20	$346.32	$196.56
2008	6.240	22.360	$692.64	$592.80	$380.64	$268.32
2009	4.160	28.340	$622.96	$556.40	$414.96	$340.08
2010	2.080	34.320	$553.28	$520.00	$449.28	$411.84

Table 4: 2006-2010 Tax Rates During Shift from Buildings to Land

As you can see, the results become much more dramatic as the shift to land continues. Property A, who has had a great deal of value invested into it, is finally rewarded with a 33.5% tax cut and a savings of $278.72. Property B, though not in the best of condition, is given a 21.9% cut and a savings of $145.60 (which will hopefully encourage them to renovate further). Property C's unfair tax break finally ends, and the owner is now responsible for a 44% increase of $137.28. Property D will rightly experience the severest increase of 230% and $287.04, a just penalty for withholding unproductive land from the market in order to speculate on rising land values, to the detriment of the community and economy.

Good properties like property A should be rewarded for their responsible and productive use of land. Owners that maintain, renovate, or even rebuild their properties will no longer be penalized for such improvements, and the tax savings should encourage them to add even more value to their properties. These homes, businesses, and other properties have remained the faithful bedrock of the city's neighborhoods and economy, so supporting and expanding this core will be essential to redevelopment. Lifting the tax burden they have had to bear should help to raise their spirits, giving them a renewed sense of hope and a reason to reengage and reinvest in the city's future. By adopting a LVT and implementing the local economic development strategies in Part II, the city will be well on its way to restoring high levels of home ownership, stable neighborhoods, and a large middle-class population.

Bad and ugly properties, both active and inactive, should receive both pressure and incentive to improve their condition. If an owner is struggling to keep their property functioning, perhaps it should be sold to someone more capable of keeping it productive (and perhaps profitable). While a LVT will certainly drive more landowners to put idle or deteriorating properties on the market, the community should also help those who wish to hold onto their property and manage it responsibly (but need assistance) by providing financial resources such as the CDFI. If the property is an abandoned building or vacant lot, the problems of speculation and "cashing out" on the public value of land through higher rents and sale prices can be prevented with a significant LVT. Because many of these properties are the major source of some of our biggest community problems and are often owned by non-residents who have little concern for the condition of their property or its effect on the neighborhood, addressing them must be a top priority towards positive and lasting change. A LVT is the first and best strategy to tackle these fundamental challenges, ending the tax breaks that inadvertently subsidize the blight, slums, poverty, and crime that continue to hold the city back.

To make the property tax even more efficient, effective, and especially equitable, the city must also address the long-running problem of property reassessment. It is important to understand that land values aren't fixed; instead, they're based on real activity of the local real estate market and the ever-changing conditions of the community. Buildings, on the other hand, tend to depreciate in value as they age or become less desirable due to their particular design, size, or utility. Reassessments are necessary to adjust property valuation for taxation purposes, and if not conducted regularly can lead to significant distortions both in public revenue collection and private real-estate activity, often by greatly under-assessing land and over-assessing buildings.

Unfortunately, this is exactly what has been happening in Berks county. The county government is responsible for reassessment, but has been postponing it since 1994 due to the major political ramifications it could have. The main issue is the fact that our county suffered severe levels of sprawl, which has caused older suburbs and even rural areas to explode in residential and commercial development and consequently, rising demand and property value. Owners of properties built since the last reassessment tend to pay more property taxes than existing owners, even after an equalization reduction of almost 10% of market value. Some of these new owners think that having higher taxes because their building is valued often up to $20,000 more than similar existing properties is unfair, and call for the county to reassess all properties so that older and undervalued properties pay their fair share. The older property owners, who are often also older voters and a serious electoral force, don't welcome the rapid growth and problems it brings, and accuse the newer owners of living beyond their means. Such a situation presents a serious problem to any county commissioner seeking another term.

This situation is creating problems for Reading as well. Over the past few decades, the land value in the city rapidly declined as demand for city properties dropped and new suburban development grew. The built environment has also experienced reductions in value, mainly due to the fact that most buildings and other structures are over a century old and most residents cannot afford major renovations. In general, cities' property values have lost over 50% of their overall value; while the average property elsewhere in the county is worth over $250,000, the average city property is valued under $80,000. Recent activity is increasing these values, but the less city properties are assessed at, the less government revenue will be available from true land values. Undervalued land assessment will also weaken a LVT's ability to collect higher amounts from bad and ugly properties, which will reduce the burden able to be shifted off of good properties and commerce and limit the amount of idle properties pressured back into the market and used for productive uses. In addition to increasing blight, when valuable land in developed areas such as cities remains idle due to speculation and negligence it also forces the outward expansion onto previously undeveloped land, putting more farms and open space at risk for sprawl.

To address these problems, the city should conduct its own annual reassessments of its properties. State law allows Third Class cities such as Reading to retain a city assessor and council of assistant assessors to perform the task.[40] Technology has made regular market-value assessment much easier, and the city has already made a multi-million dollar investment in preparation for moving to a LVT. It is estimated that buildings and improvements are responsible for 60% of assessment costs, so were the city to reach the ideal state of 100% LVT and able to phase out improvement valuation altogether, the reassessment would be even less costly and complicated. An additional benefit of the LVT is that because the property tax is shifted to land (which is easier to assess and more steadily retains value), there is much less of a risk of revenue loss due to any assessment appeals. The city's success with internal reassessments will hopefully encourage the rest of the county to adopt the same practice, as well as consider the LVT as a true solution to tax fairness.

The controversy over assessments brings up an important issue regarding property taxes. When new policies such as a LVT are introduced to a community, some people understandably worry about the negative effects of such a major change, especially for the most vulnerable people such as seniors, the unemployed, and low- or fixed-income residents. If an older owner lives on highly-valued land, will they be forced from their home if they cannot afford the higher taxes? Will the LVT pressure landlords to sell off rental properties or raise rents if the building is on extremely valuable land?

This is one of the reasons why there is so much opposition to the school property tax, especially from seniors. In its current form, the property tax pits one generation against the next; this is a

40 53 P.S. 37501, 37503; Third Class City Code, Sections 2501, 2503.

tragic situation and must be prevented, but eliminating the property tax is not a real solution. Instead, adopting the LVT and enacting an additional policy to protect against displacement is the best approach. Other reforms such as increasing the sales or income tax only work to harm the very economies that both generations rely on, and the apparent tax relief is simply passed back as part of other costs in even more regressive forms than before.

It is important to understand that even by itself, a LVT actually lowers housing costs by putting more properties back in the market and tempering price inflation due to speculation. This is true even for the cost of space-rent in apartment buildings. In addition, Dr. Cord's studies of the LVT in Pennsylvanian municipalities shows that the number of tax defaults actually decreased after shifting the property tax to land. When enough of the land value is taxed, other taxes can be reduced and eliminated, saving even more money for responsible property owners.

Beyond the many positive market dynamics that make the LVT a highly progressive tax, the government can further protect vulnerable citizens' right to affordable housing. The Homestead Property Exclusion Act allows municipalities to exclude from taxation a fixed portion of assessed property value. The Senior Citizens Rebate and Assistance Act provides a rebate for low-income seniors of up to $500, with the state legislature likely to increase the rebate amount soon. The Real Estate Tax Deferment Program Act allows municipalities to defer property tax increases for poor, elderly, and unemployed homeowners by attaching a lien on the property (similar to a reverse mortgage). For other taxpayers, the city could ease the change by splitting the tax bill into several payments throughout the year. By taking these kind of steps, we can better address any remaining concerns related to the LVT and gain stronger public support for the reform.

Like disparities created through reassessments, there is also concern regarding displacement from economic development in general. Unfortunately, even improvements to an area can have negative effects through the phenomena known as gentrification. As a neighborhood receives reinvestment the property values steadily rise, potentially forcing out existing residents on low- or fixed-incomes (through rent or property tax increases). This creates a situation that is both good and bad at the same time for the city; while we want to increase reinvestment and the resulting public tax revenue, we must find ways to take care of those unfairly displaced by this activity. **To protect against gentrification, keep our neighborhoods diverse, and provide opportunities for disadvantaged residents to build equity, we need to ensure access to affordable quality housing.**

City Hall has taken a lead by recognizing and acting on this important issue. Put together in 2005 by a task force, the city's new housing strategy has many great ideas in the areas of rehabilitation, financing, regulation, and coordination that if carried out, will certainly help to solve our housing challenges. Adopting a LVT will round out this government plan, along with mechanisms to help protect against displacement.

One organization, named Our City Reading, Inc., is making important contributions to providing affordable homes throughout the city. After receiving vacant buildings—many former rental units—from HUD and the city's Asset Control Area Program, the organization completely rehabilitates them as single-family homes and sells them to first-time buyers. Partnerships with local banks and funding assistance from government grants provide buyers with an affordable down-payment and lower interest rate loan. The program also employs local contractors to do the work, creating jobs and skill-building work opportunities. It is an excellent example of the many benefits a single project can achieve.

When attempting to address the challenge of affordable housing, we need to think about the larger democratic and economic impacts of our strategies as well. This is especially true due to the growing majority of residents living in rental properties. To help rebuild our neighborhoods and local economy, we must stop allowing rent and the control of local land to end up the in hands of absentee owners outside of the community who rarely have our best interests in mind. If the land was more directly owned and controlled by the community, rent could remain affordable, practically every dollar of rent money could be used to further reinvest in our neighborhoods, and land-use decisions could be made sustainably and democratically. **To do this, residents, businesses, and other organizations in the city should come together to form a community land trust (CLT).**

Many people are familiar with the general idea of land trusts, which are often used by nature conservancies to preserve forests, wetlands, and other natural areas. Land trusts are also increasingly used to purchase and preserve farmland from the threat of development and sprawl. After receiving the land through donation, inheritance, or purchase, the new owners form or hand the title over to a non-profit preservation trust, who pulls the land out of the open real estate market and may use the land for limited purposes such as environmental education and farming. Many people make tax-deductible donations or join as members to support the ongoing conservation efforts.

In a CLT however, land is protected for the exclusive use—which may or may not include preservation—of the community. Instead of traditional private ownership of property, the trust owns the land, and all residents that live on the land lease the land from the trust. For people renting apartments, this is no different from a traditional lease, except that the trust owns the building and land. However, CLTs also have many homeowners; in this case, the homeowners own their home and all improvements to the property and simply lease the underlying land from the trust, usually in renewable 99-year durations. The trust can also lease land for other purposes, such as to businesses and for agricultural purposes, though we'll focus only on housing needs here.

Like other land trusts, a CLT can acquire land through a variety of ways. These properties need not be located in contiguous areas, either; the best approach is probably to acquire land from areas scattered all over the city, which can help ensure access to affordable housing everywhere. Because CLTs are non-profits, properties can be donated as gifts from individuals or businesses. Members of the trust can also pool resources to purchase property on the open market, perhaps through sheriff sales and bank foreclosures. Additionally, they can partner with the city and receive seized properties, which could dramatically reduce the number of abandoned properties throughout the city. Once the trust owns the property, they then renovate it and make it available to low-income citizens. With each newly-renovated property, they can then use revenue from rent and leases to acquire, restore, and manage additional buildings.

Helping the CLT acquire and restore properties opens up some interesting opportunities. First, CLTs make the ideal model to funnel state and federal housing assistance funds into, because those subsidies then remain in the community and long-term affordable housing is guaranteed. It could also fast-track building permits on CLT land to encourage development, perhaps waiving included fees. And since restoring buildings is such a labor intensive effort, the CLT could employ able-bodied people on its waiting list to help do the work, paying them in a combination of normal cash, community currency, and rent credit while giving them useful work experience. Additionally, instead of concentrating people needing housing assistance into public housing projects, this also encourages income-mixing within all neighborhoods, where they can more readily remain productive members of society and hopefully be exposed to more positive influences.

In restoring properties, CLTs should also require the use of sustainable building practices and support of the local economy for their goods and services. If the new homes are well-made using local supplies and provide high levels of energy, water, and waste conservation, they'll cost less to operate and maintain and the savings can be passed on the residents. To keep more money circulating within the community, the CLT should accept local currency as a portion of rent payment and set up finance programs with the CDFI. And by using community corporations for property development and maintenance needs, the local economy will further benefit.

Besides building efficiency, there are several general ways that CLTs keep the cost of property affordable. First, it has more options to acquire land in the first place, which it can effectively turn around to produce revenue. Second, as a non-profit it can qualify for special savings and funding streams. Because it retains ownership of its land, it is able to keep its properties out of the inflationary open market, always undercutting other real estate prices. Finally, providing affordable housing is clearly communicated in the CLTs mission statement and bylaws, which are enforced by the organization's Board of Directors and includes both resident representatives and non-resident representatives from the community.[41]

This structure of local control is especially important. With CLT residents, their neighbors, and representatives from the larger community democratically managing the trust, decisions can be made in the interest of those directly affected. In contrast to private rental units owned and operated by absentee landlords, a CLT is more likely to support its residents instead of just squeezing rent increases out of them and maintain the properties instead of simply keeping them operating with enough of a profit margin. Local control will also allow the neighborhood to craft and enforce effective lease agreements and quickly deal with problem tenants.

CLTs can offer a wide variety of housing options to members of the community. For those in transition, shelters similar to hostels providing secure sleeping quarters, lockers, and shower facilities could be provided on a daily, weekly, or monthly basis. Larger properties and longer-term leases can also be offered for efficiencies, one-, two-, or three-bedroom apartments, condominiums, co-ops, or even whole houses. Special "accessible" properties should also be designed for seniors and citizens with disabilities, who are often limited to large living complexes and deserve more community-integrated and independent housing options, too.

Besides rentals however, CLTs also offer many attractive benefits for those wanting to own a home or participate in whole cohousing developments. For the most part, owning a home on CLT

41 Non-resident representation could be made up from members of the various neighborhood councils that have CLT properties in their district.

land is no different than under normal circumstances. Most important, the homes are substantially more affordable because they reside on the trust's land. Mortgages can still be made available to a homebuyer for property on CLT land.[42] The house itself and all other things included as part of the building become the rightful property of the owner-occupier, and this property can remain in custody of the owner and their descendants as long as the provisions of the land lease are followed and property taxes are paid. Subleasing may also be allowed, as long as the owner remains a resident of the community. The main limitation is placed on the sale of the property, which must be made back to the CLT. The selling price is based on the CLT's resale formula, which typically determines the maximum price as the original sum paid by the seller plus a certain percentage of any increase in appraised value. This keeps the properties affordable and prevents them from being absorbed into the housing bubble. As you might have noticed, the CLT process of acquiring, rehabilitating, and selling homes is strikingly similar to the one used by Our City Reading, Inc. With a few basic changes, Our City Reading could be converted into an excellent CLT model, selling (as well as renting) the buildings but keeping control of the land.

You may wonder how CLT property sale prices and adjusted appraisal is fair and beneficial to homeowners and the larger community. It is fair because it is purely by choice; those transferring property to the CLT and those leasing land and purchasing buildings from the CLT do so because they support its mission and see benefit from participating. Those buying CLT properties typically aren't investing when purchasing a home; instead they're attempting to stabilize their assets and build, are provided that opportunity through the security and support of CLT land leases, and are obligated to pass this opportunity on to the next buyer. Although the CLT does keep housing costs "artificially" lower than that which the open market would bear, which also suppresses assessments and property taxes on the CLT's properties, it has the very real community benefits of ensuring affordable housing and preventing poverty, blight, and crime. At the same time, they also temper inflationary real estate markets, which helps to keep the local economy under control. Additionally, if the property taxes are almost completely based on land-value, a good amount of this revenue will be captured anyhow.

Community land trusts, like the land value tax, may be difficult to understand at first because of our concept of private property. Generally, we think of private property to be a single concept, and to include both land itself and improvements to land, such as building a house or growing a garden. However, the scope of private property already has limitations. Regardless of if you currently own your home, you are still required to pay property taxes. If you fail to pay, you may then lose the very property you claimed to own. Also, private property can only remain owned by individuals if there are laws and other social controls to protect the right to property. In this sense, property taxes are a "rent" or "lease payment" made to the community for the right to hold

42 This isn't to say there aren't challenges to getting a mortgage on property whose land is held by a trust. As the Institute for Community Economics explains, mortgage agreements that address the concerns of lenders while protecting the CLT's long-term interest in the property can and have been negotiated. Such agreements generally permit the CLT to act—if necessary—to prevent foreclosure and the sale of the property (and land) on the open market. In this case, the lender is given a claim on the borrower's house and "leasehold interest" but the CLT's "fee interest" in the land is not mortgaged. This type of "leasehold mortgage" can and has been successfully insured by the Federal Housing Authority and has been purchased by Fannie Mae and a number of state housing finance agencies, as well as banks. In our case, having a strong relationship with the local CDFI—who will be more understanding of and willing to support these financing stipulations—is probably the best approach. In fact, the CDFI could offer better rates to borrowers seeking CLT property as an incentive to bring more city land back under local control.

and enforce claims to your land. Because land and all of the natural things it includes are widely understood to be owned by society as a whole and existing in value both before and after any ownership claims, while the things each person produces from that land are considered to be their rightful property for ownership or exchange, it is only fair to tax that which society owns as a “usage fee” and not the true private property of each person. No other current tax can claim this fairness.

CLTs, then, attempt to address these modern shortcomings. On a governance level, they retain control of land with the community that owns it and can better put it to use serving real community needs. On an economic level, they recapture “ground rent” from residents and recycle it with the community instead of allowing the land value they created capitalize into rent checks leaving the area, never to return. Environmentally, they can encourage better land and resource use decisions since the effects remain in our backyard. Because of these reasons, Reading should strongly consider establishing a CLT to help drive our democratic, self-reliance, and sustainability efforts.

One of the best (and most successful) examples of a CLT in action is the intentional community of Arden, DE. Established in 1900 by Frank Stephens and Will Price and funded by Joseph Fels, Arden was to become a working model of Henry George’s land tax principle. All of the residential land in the village is owned by a non-profit trust that collects the land rent from leaseholders (who own the buildings on the land) and assessed by an elected 7-member board of assessors. Although some of the original goals of the community have faded or evolved over the past century, Arden remains a thriving and tightly-knit community. Besides the use of a land trust, other features that have made the community nationally popular include being the only entire municipality to be in the the National Register of Historic Places; the first “garden city” with half the land featuring beautiful gardens, parks, forests, and pedestrian-friendly footpaths that criss-cross the village; a creative haven for visual artists, crafts people, musicians, and actors; and a true democracy that uses proportional representation for local elections. Arden continues to be an inspiration for those seeking thriving communities based on sound public finance and strong local control.

Another way to dramatically increase neighborhood revitalization is through building restoration and preservation. The city’s buildings, many of which have significant historical value, high quality construction, and display the remarkable styles of Germanic, Georgian, and Victorian architecture, are among its most important assets. By encouraging improvements and making the necessary financing (through the local CDFI) more accessible, we’ll be able to restore an important part of our city’s heritage, enhance our neighborhoods’ appearance, improve property values, increase the tax base, and create more business opportunities.

With age, most of city’s buildings have reached a point where significant repair is needed. On the outside, one can see old porches, stairs, roofs, and windows that need to be replaced, exteriors that need to be repointed or repainted, and foundations that need reinforcement. Inside, walls and ceilings suffer water damage and floors sag. Besides structural work, much of the old wiring, plumbing, lighting, cabinetry, floor coverings, and appliances also need to be replaced. A great deal of the area surrounding buildings is deteriorating as well, including the sidewalks, curbs, streets, parks, walls, and bridges. Because redevelopment (and ongoing maintenance) is often more labor intensive than new development, it has the potential to create a large amount of local jobs and a sustained industry.

Besides working to repair the aging infrastructure, the city should make it a priority to restore its historic appearance, both downtown and throughout every neighborhood. Many older cities are recognizing the enormous benefits historical restoration and preservation can offer, improving property values, enhancing the city's appearance, and capitalizing on the resulting tourist, home-buyer, and business location appeal. This effort already exists through the Historical Architectural Review Board (HARB) and the city's Historic Preservation Officer. This group has the authority to review and designate buildings, structures, sites, objects, and districts of historical and architectural significance, review building permits, provide research and technical assistance, and craft relevant ordinances and building code adaptations. Increasing their resources and providing more public interest and participation will help make preservation an important and successful goal. Additionally, the city should expand its use of attractive incentives such as tax credits and financing options for restoration efforts, which can be directed towards things like removing unoriginal building facades such as permastone and vinyl siding. Community-lead and public/private partnerships such as the Centre Park Historic District and the Artifact Bank, which collects building materials, uses them in restoration efforts, and protects them from being discarded, are also successful preservation initiatives.

In addition to their overall physical problems, many of our buildings are adversely affecting our health and well-being. While many older buildings still may contain lead and asbestos-based materials, even more modern buildings are full of harmful materials. This includes vinyl floors and siding, polyvinyl chloride (PVC), radon, paints, wood stains, dioxin, and other volatile organic compounds and persistent organic pollutants—many of which are also detrimental to the environment. Most buildings also suffer poor indoor air quality from a lack of adequate ventilation or from ventilation systems carrying mold, mildew, and other particle pollutants. All these problems are well-recognized as part of "sick building" syndrome.

While the thought of almost an entire city's built environment being in need of major renovation can be overwhelming, it is important to recognize the incredible economic and ecological opportunities available as well. **Because the way we design and build our community has significant environmental impacts, we should begin fostering an eco-friendly construction and restoration industry to develop "green" buildings.** Similar to ESCOs and WASCOs, these companies could focus on sustainable building practices and materials, bringing the built environment closer to the principles and processes of the natural one. Demand for these services will only continue to grow as people are exposed to the social, economic, and environmental benefits of green buildings, and this provides another excellent opportunity to establish a promising business cluster.

Such a movement is already underway in many areas across the country, where experimental houses or whole "ecovillages" are being developed using both ancient and cutting-edge development techniques such as strawbale, garden roofing, papercrete, cordwood masonry, rammed earth, bamboo, porous surfacing, timber frame, compact design, sheltered earth, cob, lifecycle analysis, and recycled concrete—all durable and affordable building approaches whose materials could be produced locally. Many of these communities are also incorporating sustainability and self-reliance directly into their infrastructure, adopting renewable energy, water conservation, local agriculture, and zero waste initiatives as the foundation of their community life. And although a large number of these projects start from scratch, there are other efforts to transform existing urban and suburban areas, from small row homes and townhouses to condominiums and apartment complexes.

To encourage a shift to sustainable building, the city should take several important steps. Before anything else, it should pass the LVT with a significant reduction on buildings—we certainly don't want to penalize sustainable property improvement. Second, the building code and zoning should be updated to allow for these approaches, assuming normal health and safety enforcement remains in place. Many of these energy, water, and waste efficiency approaches could perhaps even become mandatory in the building code, driving sustainability into redevelopment projects and fueling the green building industry. Third, sustainable development should become a requirement for all new public building projects, perhaps through the use of the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) certification program. A high priority should be the "greening" of our schools; studies continue to prove that schools' physical design have significant impact on students' health and productivity. Forth, a major educational initiative should be created that teaches the Natural Step framework and integrates it into community decision-making processes. Along with the greening of schools, the concepts of the Natural Step should be introduced to children at an early age to foster independent ecological thinking in these future innovators. Fifth, new training and certification programs could be offered through local vocational schools and colleges to introduce both current students and existing businesses to sustainable development approaches. Corporations in the community that already have environmental commitments such as ISO 14001[43] certification can take the lead by formally adopting LEED and the Natural Step and implementing them for facility renovations or new building projects.

Coordinating the work of revitalization, historical preservation, building restoration, sustainable development, open space preservation, affordable housing, resource management, commercial activity, transportation, and other land use efforts requires a comprehensive set of policies. When developing solutions with these considerations in mind, our efforts must avoid solving one problem only to introduce or exacerbate another. In addition, because our ultimate goals of establishing a diverse democracy, a resilient economy, and a healthy environment requires a stable and productive population, we must transform Reading into an incredibly attractive place for people to want to live, work, and visit. Such an effort is critical to rebuilding our neighborhoods, downtown, economy, tax base, and school system. **To ensure that our community development goals are met we should adopt New Urbanism, a planning framework that integrates design into land management at the most fundamental level.** As the leading model for practical application of Smart Growth principles, New Urbanism should become a key component of greater Reading and Berks county's development strategies.

Drafted by a diverse group of architects, planners, citizens, scholars, public officials, and developers that later became the Congress for the New Urbanism (CNU), the Charter of New Urbanism attempts to redefine the way our cities and towns are built. Instead of large, single-use developments that rely on roads and vehicles for mobility, the New Urbanist model scraps much of the modern development principles responsible for sprawling suburbs and strip malls (all

43 ISO 14001 is an international environmental management standard.

designed for the car-dominated culture) in favor of more people-centered design. These new priorities include providing walkable communities with abundant open public spaces and a diverse range of mixed land use, including housing, businesses, and recreation.

Many of the basic urban design principles of New Urbanism are not actually new. For almost the first half of the 20th century, Reading was able to sufficiently meet most of its peoples' daily needs. Different housing types were available for just about every family income level. Most jobs were located in the neighborhoods where people lived, only a short walk, bike, or trolley ride away. A variety of shops and markets offering goods and services existed in almost every neighborhood. Civic institutions, neighborhood associations, entertainment venues, and public parks helped vital social networks thrive. In fact, most of best-loved cities and towns in America have been carefully designed from the beginning with these considerations in mind. New Urbanism takes these classic urban planning principles and integrates them with the contemporary goals of sustainability and livability.

Like the Natural Step, which can be applied to everything from the design of a product to national energy policy, New Urbanism is incredibly versatile and scalable. It can be applied to any variety of community—urban, suburban, or rural—and works with many types of architecture, area layouts, and density. Besides redesigning city cores and neighborhoods, it can be used to modify existing suburban areas through things such as redevelopment of older areas, infilling, and even retrofitting a "town center" or main street in previously single-use residential areas.

On a regional level, New Urbanism seeks to create internally diverse and externally distinct communities. Inter-jurisdictional land and resource use issues must be taken into consideration, which encourages municipalities to work together. Clear boundaries contribute to a discrete sense of place, with preserved open space such as wilderness or farms separating each municipality where possible. Each area of the municipality (outwards from the center) is designated as one of seven "transects" (urban core, urban center, general urban, suburban, rural reserve, rural preserve) and a number of special districts, each with their own building design specifications, street sizes, and an appropriate mixture of residential, commercial, and other land uses. Different types of homes and jobs should be available, helping to reduce travel requirements and providing locally for people's social and economic needs.

On the neighborhood level, a special focus is returned to people-centered design. Each neighborhood, like the municipality, should have a center and an edge, with the center being a public space such as a square, green, or even an important intersection. The optimal size for each neighborhood is a quarter-mile from the center to the edge, which ideally should be walkable in five minutes for the average person. Within this walking distance, people's daily needs such as housing, stores, workplaces, schools, houses of worship, recreation, and connection to transit stops should be accessible. This provides enormous opportunities for local enterprises to be established in each neighborhood to meet the neighborhood's needs.

In order to redesign neighborhoods to fulfill these goals, we must carefully plan the individual components. Streets and sidewalks should appear as safe, shared, and inviting places that accommodate cars but encourage other forms of mobility. Signs and place markers will help people remain oriented, and proper lighting at night will also guide people and help them feel safer. Building should be used as consistent and understandable edges, with easily accessible entrances that open onto sidewalks, not parking lots, and with windows and doors facing the street. They should also match the context and character of the surroundings, following existing architecture and style when possible. Public spaces, both intentional and accidental, where people gather, interact, trade, and relax, should be present in every neighborhood, if not every block. Overall, there should be a dense, diverse, and open design that promotes livable and enjoyable spaces.

In order to develop more dense, compact, walkable, and mixed-use space, we'll need to adopt relevant standards as part of the zoning code. Most current urban zoning discourages mixed-use design, except for in special districts such as in the city center, and much of the zoning code throughout the county is actually a blueprint for sprawl. This restricts the redesign of residential and commercial or industrial areas, often leaving to more poor redevelopment choices. **To ensure that our vision of a sustainable and livable city doesn't get lost during redevelopment, we should consider moving to form-based zoning codes, which will bring the benefits of New Urbanism to all corners of the city.**

Unlike conventional zoning codes, form-based codes place more attention on the design of places than simply land-use. Using graphics and simple terminology instead of arcane regulatory language, form-based codes describe standards for building height, building placement, and the location of things such as doors, windows, trees, and sidewalks. Although it is excellent for designing new developments to emulate traditional neighborhoods found in older urban areas, it is also important for the redevelopment or infill of existing urban areas, where the design should seek to preserve existing form, respect historical character, make people the priority, and encourage more compact, dense, and mixed-use structures.

Besides helping the community standardize on New Urbanist design principles, form-based coding also has a number of other benefits. First, the process of adopting form-based codes (called a charette) is a participatory process that involves and educates the public, giving them opportunity to help design the kind of community they want to live in.[44] Second, it should help to actually cut red tape by making approving building permits more efficient; form-based code is prescriptive in nature, giving developers a clear idea of what is possible instead of what isn't, so that they can more easily comply. Third, since it allows for mixed-use it should increase the development potential—and thus property value—for all areas of the city.

Recognizing the growing potential and demand for New Urbanism in the state, Pennsylvania (along with Wisconsin and Connecticut) has produced enabling legislation to permit New Urbanist development as an effective solution to sprawl. Part of the Municipal Planning Code, the legislation empowers municipalities to enact and implement New Urbanism standards for development purposes.

The Association for New Urbanism in Pennsylvania (ANUPA) explains that by applying New Urbanist principles, the various groups in the community that have struggled with each other in the past over conflicting interests could all benefit substantially. The government will benefit from compact and mixed-use development through more efficient use of infrastructure, a larger tax base, increased social and economic activity, and the fostering of a unique sense of place. Residents will benefit by having more daily needs available without needing a car, less traffic to

44 Developing the code from scratch might not be necessary either, as the popular SmartCode form-based code has recently been released to the public for free use, and could serve as a template for our purposes.

deal with, stronger social connections, improved property values, and better (or even reduced) use of tax money. Businesses can enjoy being surrounded by a constant customer base, have more small locations for start-up opportunities, and market themselves as unique, locally-focused, and personal service-oriented alternatives to the modern homogeneous retail environment. Developers will benefit from more diverse possibilities and increased square footage to develop and lease, the potential of residencies with attractive business establishments nearby, and less need for parking and transportation costs.

The reasons to adopt New Urbanism are clear, as it can be used to help solve many social, economic, and environmental challenges in a cohesive way. Cities such as Reading have suffered from rapid divestment and deterioration in all these areas as the automobile took hold and residential and commercial development began to spread out into the fringes. After almost five decades of incredible growth of the suburbs—many lacking sidewalks, public spaces, walkable business districts, and other historical features of cities—the pendulum is beginning to swing back the other way. This presents an opportunity to rebuild Reading in a way that learns from mistakes of the past and prepares for the challenges of the future.

As a CNU report entitled *The Coming Demand* points out, reinvesting back into our cities can certainly pay off. With suburban real estate markets highly inflated, sprawl now considered a bad word, and growing concerns over the future of energy and transportation, old cities and real neighborhoods are becoming hot markets once again. Dead suburban malls are being transformed into full neighborhoods, villages are popping up next to transit lines, and renewed interest in downtowns are drawing back single professionals and aging adults in addition to families. Encouraging news about growing demand for properties in Reading is already beginning to appear. A March, 2006 report in the Reading Eagle indicates that the city is experiencing a boom in real estate sales, up more than 40% from almost 4 years ago, with the average selling price for a home rising from $38,500 in 2002 to $55,600 based on last year's data. A program named Blueprint Communities is currently examining over 2,000 homes in Southeast Reading in hopes of developing a neighborhood revitalization plan and securing funding to restore the buildings. Many of the participants hope to eventually purchase and renovate a home in the area, transforming and restoring the community's significant historical value.

The diverse, walkable, and livable cities promoted by the New Urbanism model is exactly what many people are looking for in today's real estate market, and Reading should take the lead in meeting that demand. Historic preservation, community beautification, and green building practices will protect our neighborhoods' past, improve their present, and prepare them for the future. The LVT will promote improvements, eliminate the root causes of blight and decay, and ensure economic growth is properly recaptured as public finance for further development. A community land trust will help maintain affordable housing yet keep control and responsibility of rental properties in the community's hands, not absentee owners in New York City. Innovative programs such as Our City Reading, Inc. and a Community Development Financial Institution can help restore buildings for homes and businesses and provide financing programs to put local owners in them. All together, these strategies will foster fertile ground for the growth of a city where everyone will want to call home.

Transportation Management

Like land, another one of the most significant factors influencing our lives—and a major challenge to sustainability—is transportation. For the past century, Americans have experienced a love affair with the automobile and freedom of the open road, and this value system has become deeply ingrained within the design of society. At the same time, almost every aspect of daily life—including where we live, where we work, where we shop, and what we buy—is now heavily reliant on the modern transportation infrastructure. Together, this false sense of independence and its true state of dependence have formed a twisted dynamic that distorts transportation realities and creates significant challenges to community sustainability.

To be sure, the environmental costs of our transportation use patterns are well-understood—even by people that aren't willing to make a serious effort to change. Vehicle emissions are the largest form of air pollution, including carbon monoxide, nitrogen oxides, hydrocarbons, and cancer-causing substances such as soot, benzene, arsenic, formaldehyde, and lead. Likewise, these emissions are a leading contributor to the accumulation of atmospheric CO_2 and resulting climate change. Vehicles and roads are a major source of water pollution due to surface runoff, road salt, antifreeze/additive leaks, and oil spills. They also cause major damage to wildlife and natural habitats due to roadkills, the building of new roads, and oil exploration on land and sea. Transportation also consumes almost half of all petroleum supplies, more than the total amount produced domestically.

Less understood however, are the deep economic costs of transportation. The average monthly costs of transportation—which includes car payments, insurance, fuel, repairs, and various other related expenses—is second on average only to the cost of housing. At the same time though, this doesn't even come close to the true price; nearly 90% of transportation costs are subsidized and hidden in the price of everything else, which is then charged to every taxpayer and consumer—regardless of if or how much they actually use it. And at roughly 25% of the GDP—larger than the amount spent on education, health care, or even the military—it is a bill that could soon bankrupt the nation.[45]

On top of these economic problems is a political culture reluctant to change course. Because transportation is tightly intertwined with energy, any changes in policy are likely to only provide superficial reforms. However, if the forecasts of peak oil and climate change are correct, our entire transportation infrastructure—along with the economy—will come to a screeching halt. Therefore, if we are to forward an agenda of self-reliance and sustainability and become an influential model for others to follow, we need to seriously address the transportation problem.

In order to reduce the problems of transportation, such as pollution, road wear and tear, fuel consumption, traffic congestion, and accidents, the most logical thing to do is develop policies to help keep more vehicles off the road in the first place. Most environmentalists have been trying this for decades, attempting to educate people about the problems of increased automobile use, which ironically lead to the rise of the SUV as the best-selling vehicle in the country. Yet as we've seen from the modest increase in fuel prices, the most effective tactics hit people where it hurts most—their wallets.

45 It is estimated that automobile accidents alone consist of almost 8% of the GDP, not even accounting for the significant loss of life and long-term cost of injuries and disabilities.

One of the most popular approaches is the use of traffic congestion fees during peak volume periods. Everyday, around the the rush hours of 8 to 9am and 5 to 6pm, some cities are collecting tolls of usually 2 to 5 dollars along large roads on their borders. Additional areas in the city may also charge, perhaps in school zones, business districts, and dangerous intersections. Signs are clearly posted that warn drivers and offer detours, and passing vehicles are identified with same types of technologies used to catch those that run red lights. Other equipment may also be offered that operates similar to the EZ-Pass, or it might be as simple as a window decal that drivers won't want to be caught without. In London, a city that has had great success with their system, violators are given until the end of the day to pay the normal rate via phone or the Web, after which it rapidly increases to a substantial fine.

Such a system has an attractive set of benefits. First, it reduces traffic congestion during key times of day, providing incentive for people to leave earlier (or later), carpool, or take public transit instead. Because stop and go traffic is a terrible waste of fuel and contributes to more pollution, reducing congestion also helps address these problems. Less traffic is also safer, both for vehicles, pedestrians, and people out on bikes. Although most drivers are initially annoyed by the additional expense, the reduced traffic can often noticeably cut their commute time, lower their stress levels, help buses run on time, and hopefully save more fenders and lives. Although congestion fees aren't a good source of revenue, they certainly provide substantial benefits to the entire community.

Another excellent way to reduce unnecessary vehicle use but also collect significant public revenue is through expanded paid parking. As Donald Shoup explains in his book *The High Cost of Free Parking*, the proliferation of so-called "free parking" distorts our transportation choices, warps community design, damages the economy, and contributes to environmental degradation. Perhaps the most overlooked factor of the transportation problem, the city (and county) should begin designing new land-use policies to address this important issue.

The statistics associated with free parking are surprising: 99% of parking is "free," and vehicles remain parked for 95% of the time. But in reality, the cost of parking is never free. The average parking space would usually be prime real estate in any other case, and even as paved asphalt costs more than the average car. The price is instead bundled with the cost of everything else, including housing, food, entertainment, and taxes, and winds up being paid by everyone—whether they own a car or not. When parking is free or incredibly cheap, it also leads to another obvious problem: a lack of parking. Because there is only a limited number of spaces in any given area (especially in the city), demand is often larger than supply. While some people are willing to simply pay to park in a garage, the majority of us "cruise" the area instead, searching for a free or cheaper curb space near our destination. This cruising habit is a major contributor to traffic congestion and associated problems.

To solve these challenges, Shoup turns back to the principles of Henry George and land value taxation. Free parking, like free lunch, simply doesn't exist. When you park your car for free—especially on public land—you are expecting an unfair property right unreserved in any other situation. Similar to a green tax or user fee, the owners of parked vehicles should pay the community that owns the land "rent" for the right to use the land when parking. By following the three simple steps below, we can free up more parking, eliminate cruising, unbundle parking costs from other expenses, create incentives for alternate methods of transportation, and generate a steady source of public revenue to improve the community.

First, the city should remove off-street parking requirements. Although we certainly need parking, modern zoning policy for it—which is often arbitrary and encourages bad transportation habits—tends to create too much of a good thing. The results of distorted parking requirements are everywhere; almost every new retail complex or restaurant's parking lot is nearly three times the size of the buildings, designed for peak capacity yet almost always less than half-full. And because drivers always anticipate finding free parking wherever they go, they are generally inclined to always take their own vehicle. Removing these requirements will reduce construction and lease costs and free up more land for useful development purposes, hopefully encouraging more human-centered designs.

Second, the community should begin charging market prices for curb parking. The current method of time-limited coin meters underprices the parking space supply and does little to address the problems of demand. For those that can't or won't park in a metered space, spillover into nearby residential areas occurs, which often leads to the creation of permit parking districts that have an excess of available space. To tackle these problems, a market-driven price for parking in every section of the city will balance the varying demand for parking with the fixed supply of spaces. Parking in the business district will go for a premium price, while the cost of parking in neighborhoods will be lower. People that live in an area could receive annual permits for their vehicles while outsiders would have to pay each visit. And instead of time-limited coin meters, newer "pay and display" systems should be installed that can intelligently charge different prices based on the time of day, number of spaces, or other variables, and collects valuable statistics that can be used to further adjust the market price. Some systems provide an in-vehicle device that charges parking costs to a smart card and gets hung on the rear-view mirror; this offers the benefits of not having to fumble with loose change or faulty street meters and prevents drivers from paying for more time than they need. Such a system might also accept the community currency as payment.

Third, parking revenue should be dedicated to public improvements on blocks where curb parking is paid. Streets should be divided into "parking benefit districts" which are created and controlled by the residents in that area. This would be an excellent role for neighborhood councils. These districts would determine their own borders, set the price to park there, and have the revenue collected ear-marked for use in that neighborhood. This money can then be used for public improvements in the area, such as sidewalk repairs, curb cuts, street lights, pocket parks, and playgrounds—all funded by land rent paid by "foreigners living abroad." And since any system will require strong enforcement, it is an excellent way to help finance meter monitors and bike patrol in every neighborhood that charges for parking.

Besides reducing the amount of vehicle usage we should also help trigger a shift to biofuels and cut harmful emission levels, perhaps through the creation of an emissions pollution fee. Since local charges are placed on other forms of pollution in the community, such as trash and sewage, it's fair to expect the same for emissions. Similar to the TerraPass or Carbon Fund, all vehicles registered in the area would be charged a yearly pollution fee based on the vehicle's size, type, and mileage. This fee could be collected as part of the annual emissions test, with the payment and vehicle information sent to a central registry. Small, high-mileage, and hybrid cars would pay a smaller fee while larger, low-mileage vehicles would pay more.

The revenue collected from registered vehicles should then be distributed using the feebate model, being completely reinvested in biofuel production and consumption. Businesses and educational organizations that are involved in significant aspects of the local biofuel industry, such as fuel crop agriculture, refinery, distribution, or research could qualify for grants and tax credits, all of which will help increase supply. Drivers who use biofuel to power their vehicles would receive a significant rebate of their emissions fee in the form of a coupon for a biofuel purchase, which will help drive demand. To show commitment to the formation of a biofuel industry, the city, school district, and other large organizations such as BARTA should commit to a conversion of biofuel-powered vehicle fleets.

Our transportation policy must also increase the role and flexibility of public transit options. Although there are many types of transportation alternatives to private vehicles, their effectiveness is limited by a large number of factors including cost, coverage, availability, flexibility, safety, and comfort. By addressing this list of important factors and offering a full range of alternatives, we can successfully meet our community's transportation needs.

Having a high-quality public transit system is important for two main reasons. First, we need to offer an attractive alternative to the owners of private vehicles. The added penalties of parking costs, congestion tolls, and emission fees must be balanced with effective ways to avoid them. Additionally, people with vehicles are generally used to being able to go where they want, when they want to. Therefore the public transit system must be flexible enough to rapidly respond to a wide array of time, location, and distance demands. High levels of safety and comfort must also be a requirement, as many drivers have never used public transit and need positive experiences to support it.

Second, we must meet the needs of the many people without any access to vehicles of their own. The Surface Transportation Policy Project has conducted extensive research on the relationship between poverty and transportation, explaining that access to quality public transit is just as important as affordable housing. Many low-income and working poor rely exclusively on public transit systems, which often limits them to jobs along regular routes and operating schedules. Additionally, many of these jobs are second and third shift, and the companies are located far away from the workers' homes in the urban core. This makes it both difficult, lengthy, and expensive to get to work, and access to the transit system can often be expensive, unreliable, and fragmented. These challenges also affect many seniors, who rely on public transit to help them live productive lives. To address these needs, we need to ensure the public transit system is affordable, covers the widest possible area, operates reliably, and is offered around the clock (even on holidays).

Just as important as transit system quality is quantity. If we are committed to developing an excellent public transit system, we will need to examine a variety of transportation options that can meet every need. **First, the bus service should expand the number of routes, pickup times, hours of operation, and other important improvements.** Perhaps the easiest way to encourage this expansion is through the support of businesses throughout the region; instead of providing free parking, establishments could partner with BARTA and offer "ecopasses" or transit credits to their customers and employees to address transportation needs, which is often cheaper than maintaining large parking lots and encourages the use of public transit. The bus system could also become a more enjoyable experience if it is designed to be more user-friendly. Stops should be more clearly marked, well-lit, and provide seating and cover from the weather. Routes and schedules should be posted everywhere, either as pamphlets or signs, and in an easy to understand design.

The challenge, however, is that better bus service requires better funding, and the current outlook doesn't look good. A report in March of 2006 by the Executive Director of BARTA and Chair of the Reading Area Transportation Study predicts additional 20-30% cuts in already-streamlined service due to a statewide transportation funding crisis. Because of "skyrocketing costs for fuel and health insurance," BARTA—along with other regional transit authorities across the state—needed an emergency bailout from the state, which paid for the costs by diverting federal highway funds. Another major problem is that federal operating-assistance funds will disappear after 2008, severely limiting BARTA's budget. Perhaps recognizing the need for greater economic self-reliance, the chair stated that "[i]t all comes down to the fact that we could use a dedicated, predictable growing source of funding for transit."

That source is land value taxation. Mass transit lines, like any form of public improvement, significantly increase the value of land they service. In a book titled *Taken for a Ride*, Don Riley, a property owner in South London, examined the economic impact of building the Jubilee Line Extension (JLE), a rail line designed to link Central London with East London. Recognizing that without even being involved, the massive public investment for the new rail service was actually increasing the value of his properties, he calculated the total land increases within only a 1,000 yard radius around each new JLE station. The results were staggering: the limited land he examined alone increased by £13billion while the entire cost of the rail project was only £3.5billion. If even a fraction of the land value was properly taxed, this revenue could have paid for the project entirely with no additional taxes and expanded the transit infrastructure further.

BARTA should do everything it can to understand this dynamic and support the recapture of land value to fund its operations. Consider the rise in value of the land surrounding the new BARTA Transportation Center on 8th and Franklin. Do the many derelict properties and vacant lots lining the block across the street deserve higher selling prices based on the Sovereign Center and BARTA's investments? Is there any doubt these owners, which should have sold the properties for productive commercial and residential use as perhaps shops, restaurants, and condos—especially the old nightclub building on the corner—years ago, aren't speculating because of the intense redevelopment that happened right across the street? If a LVT was properly collected along every bus route, BARTA wouldn't have to rely on constant cuts from government subsidies and could perhaps even continue to grow by recapturing value created by building new stations and expanding routes throughout the region. Getting the county and other municipalities behind the LVT is essential to properly fund mass transit.

Another transit option might be the forthcoming Schuylkill Valley Metro project, which is planning to bring passenger rail back to the area and could offer a promising alternative for people that travel between Reading and Philadelphia. A regional rail line is good way to bring more people into the Greater Reading area, and could certainly help drive the growth of the tourist and entertainment industry. It could also be an effective way to help cut down on the awful congestion plaguing the Route 422 to 76 corridor, which is a large deterrent for people that would otherwise enjoy traveling back and forth from the Reading area to Philadelphia.

This plan isn't without major drawbacks, however. Rail systems suffer from major upfront and operating costs and depend almost completely on state and federal funding. They also tend to lead to low ridership, as drivers often find little reason to travel by train without facing the economic disincentives of parking, congestion, and pollution charges within the rail project's corridor.[46] Therefore, before the city commits money that could be better invested in the local transportation infrastructure, it should press for these additional reforms (along with a LVT in municipalities along the route with revenues earmarked for rail operation) from the rail project partners. Additionally, local support for a diesel locomotive should be expressed, for the obvious purpose of utilizing biodiesel in the near future.

Besides buses and trains, we also need more decentralized and individualized transportation options. Larger, more conventional means of mass transit such as trains and buses are limited to fixed routes and schedules, which often cannot fulfill a majority of transportation needs. While alternatives do exist, such as taxi cabs and car rentals, they generally suffer from key drawbacks to becoming major components of a new public transit system. Taxi cabs have a long history of addressing transportation needs unmet by other means, and will always be useful for people unable to drive or uninterested in driving. At the same time, it can be challenging getting a taxi cab when and where you need it, and some trips require the use of a vehicle for an extended period of time, such as running errands or taking a trip. To solve these issues car rental companies offer an alternative, but they end up being too expensive for regular use and aren't available in most parts of the community.

Perhaps the best solution to the challenge of personal transportation can be found in the "car sharing" movement, which combines the positive qualities of both taxi cabs and rental cars. In a car sharing system, a person that needs a vehicle can reserve one 24 hours a day via the Web or phone from a large collection scattered around the area. When making the reservation, they decide what type of vehicle they need and how long they need it, and the system locates one currently in or soon entering the area by the scheduled time, which could be a few blocks away. When the driver gets to the vehicle, a smart card is used to unlock the doors and turn on the ignition. All this is possible due to a radio frequency system that tracks and secures the vehicles. A great example of this process is the ZipCar system currently operating in a group of large cities around the U.S.

Car sharing has an exciting number of benefits and applications. First, it will be very attractive to people used to owning their own car, as they can access a vehicle at almost any time and can use it for just about every purpose. Even better, you only pay for it when you need it, and are freed from the worries and expense of insurance, maintenance, repairs, fuel, and parking. Studies reveal that even for people that use car sharing on a daily basis it can cost substantially less that owning one (remember that vehicle costs are second only to housing), as they tend to only use it when they actually need to. In addition to cost savings, car sharing systems scale well; it's an effective solution for both urban and suburban areas. Finally, it could contribute to the demand

46 Unfortunately, rail projects fail to address the varied local transportation needs of poor and low-income people (which can be better served by road-based transit services like buses), and instead focus on a fixed regional solution for wealthier clientèle (who largely ignore rail options in favor of private vehicles anyhow).

for a biofuel infrastructure, as the network covers fuel costs and could partner with biofuel providers as a guaranteed customer to drive further investment and production.

In addition to public transit, we also need to redesign our neighborhoods around walking, biking, and other forms of community mobility. One of the biggest challenges to addressing local transportation issues is reducing our near-complete dependence on vehicles in the first place. Whether going to work, to school, shopping, or simply out for a nice evening, it's almost impossible to get around without the use of some type of motor vehicle. To reverse this trend, we need to focus on the development of the local economy and the design of our neighborhoods. Besides ensuring self-reliance, this will help our community become more vibrant, livable, and easier to get around.

Economic development will be essential to bring daily needs back into the community and reduce travel time. In each neighborhood, a wide variety of shops offering important goods and services should be accessible through a short walk or bike ride. Another approach is the development of rapid local delivery systems; instead of constantly going out to large retail chains that carry everything, local companies with smaller in-store stocks can often access these same goods at competitive prices through extensive inventory networks and have it delivered within 1-2 days. In this way, the decentralized models used for production can also be applied to distribution and retail sales.

We also need to redesign our neighborhoods to support and encourage mobility. Community policing and "design away crime" methods will help stores and shoppers feel safe. Low speed limits, traffic calming, clear crosswalks and signage, stronger right-of-way laws, and lower numbers of cars will help protect bikers and pedestrians.[47] Curb cuts and improved sidewalks will increase safety and accessibility for residents with wheelchairs and other mobility limitations, who are often forced to use the streets. Whether the situation is a child walking to school, a worker riding a bike to work, or shoppers wandering on foot among local businesses, we need safe and inviting streets and sidewalks to meet all types of mobility needs.

Beyond these efforts lies an exciting future for community mobility. Instead of streets and cars dominating the design of our neighborhoods, new priorities and transportation solutions can emerge. Whole districts full of homes, businesses, and open spaces will exist, with people free to walk, bike, or otherwise move around and about like in old European cities. Supplementing these methods would be electric, low-speed "subcars," similar in the size and role of golf carts and used to make deliveries and transport people to car share depots or other nearby locations. By taking practical but important steps now, we'll be well on our way to heralding in whatever the next transportation revolution will bring.

Waste Management

Another aspect of environmental policy in urgent need of an overhaul is our society's approach to solid waste. Besides consuming more resources per-capita than any other nation in the world,

47 The Surface Transportation Policy Project released findings as part of their *Mean Streets 2004* report that determined walking to be the most dangerous mode of transportation per mile. Per 100 million miles traveled, the fatality rate for walking is 20.1, commercial airlines is 7.3, passenger vehicles is 1.3, and public transportation is 0.75.

America generates an even larger proportion of trash and attempts to deal with it in completely unsustainable ways. Because of this, in addition to rethinking where our goods should come from, we need to decide how best to dispose of them.

Here in Berks county, our ability to deal with waste is quickly reaching unmanageable levels. This is because our county maintains the largest concentration of landfills in the state known to be the largest importer of trash in the nation. In 2003 our landfills received 2.5 million tons of trash, with 80% of it having been brought in from sources outside the county. It is a situation that is earning Berks county a reputation for being one big dumping ground, or as one county commissioner saw it becoming, the “landfill capital of the state.”

Our current “state of waste” is a logical outcome of the county’s long struggle in dealing with the trash problem. In 1990 the county commissioners attempted to draft a comprehensive solid waste plan, which quickly became mired in expensive development costs, conflict with municipalities, and lawsuits with waste facilities. When it expired in 2002 and required a renewal, it was decided that the old plan was so poorly designed that it should be scrapped in favor of a complete rewrite. Still incomplete, the new plan seems to be struggling with outstanding issues such as household hazardous wastes, recycling, and landfill capacity.

Like the county, the city has many pollution problems of its own. As neighborhoods lose homeowners and become more transient, less concern remains for the streets, sidewalks, and yards, and in many areas litter is carelessly strewn all over the place. Illegal dumping has also become a major problem, with piles of trash scattered throughout the city in yards, empty lots, abandoned buildings, and along the road—contributing to the risk of injuries, fire, contamination, and pests. The problem is compounded by a complicated system of private trash haulers and an inability to strongly enforce the trash code; instead of paying to have their trash hauled, many people find it cheaper and low-risk enough to dump it on someone else’s property.

To effectively address the trash problem, the city should continue to push forward a plan for city-wide municipal solid waste collection. Doing so will streamline trash collection, simplify accountability, discourage dumping, bring the process completely back under local control, and establish a starting point for further integrated waste management policies. A similar effort was proposed both in 1998 and 2001, but was met each time with strong opposition and complications. Although these efforts have failed, the underlying problem has not gotten better under the status quo. Instead of admitting defeat, it is time to learn from the problems of past attempts and use them as an opportunity to address the community’s concerns when crafting a better plan today.

The biggest source of objection to the previous plans came from the existing city trash haulers. In addition to concerns about losing business and jobs, they pointed to the city’s poor reputation for quality service and a sense of being left out of the process. They also questioned implementation details, such as when and how trash is collected, who will participate, the existing lack of code enforcement, and the risk of a municipal strike. By using our change framework, an effective and fair solution can be developed that utilizes democratic governance, promotes economic self-reliance, and ensures environmental sustainability.

As a first step, any new plan should require a community corporation to do the collection. This will address concerns of efficiency and service quality, allow the community to continue supporting local businesses, keep the operation in local hands, and ensure the community—not the collectors—determine the terms of the plan. Because collection needs might be varied in different areas of the city, perhaps we should adopt the concept of dividing the city into multiple collection zones. This will allow more companies to compete for contracts, keep costs in check, and reduce the threat of strikes (assuming strong labor and safety requirements are met). Smaller collectors could merge to address the required economy of scale and upgrade their operations through CDFI loans. Contracts might also include other regular services to perform on non-collection days, such as maintaining public litter baskets; collecting household hazardous, construction, and bulky item waste; and regular cleanup of problem sites.

Under this plan—which if is to be fair and comprehensive must include all residencies and businesses—the city would charge each property a collection fee and disburse payment to the district collectors. Discount vouchers or rebates could be provided for seniors and other qualified households to keep it affordable for those on low- and fixed incomes. Instead of unlimited collection, a "pay-as-you-throw" or unit pricing fee would be billed to each property.[48] Unlimited collection for a flat rate only encourages our wasteful practices, which we should seek to reduce over time; this is also the reason a fee, instead of a tax, should be imposed. This policy, combined with strong code enforcement, regular inspections, and heavy fines for improper trash preparation, dumping on a neighbor's pile or property, and unwanted rummaging should address citizens' major concerns.

In many ways, the great debate over handling trash reflects our current attitude towards waste in general. Waste management is an issue that goes beyond who hauls it; indeed, there are many serious issues involved in disposing of solid waste as well. In a 2002 study, the Pennsylvania Waste Industry Association (PWIA) pointed out that these services together provide one of the most profitable industries in the state, and argues that the state would suffer dramatically if a law like HB326, which proposes a moratorium on landfill and incinerator permits and reduces out-of-state waste import volumes, was passed. Such concerns are shortsighted, however. What PWIA might fail to understand is that its current methods of waste management already are causing long-term damage to the state by weakening economic self-reliance and ignoring environmental sustainability, and may be bringing on the conditions for its own collapse.

Our waste management systems are already operating under volatile economic conditions. Relying on the import of trash to fuel operations makes the state's waste industry just as vulnerable as other vital industries. Rising fuel costs or legislation such as HB326 could quickly cut the flow of trash transported from out of state, which would inevitably slash profits, reduce jobs, and even close affected businesses. Another problem that is quickly reaching crisis levels is that the "success" of our waste disposal has created a severe shortage of Pennsylvania's landfill capacity.

In 2002 PWIA conducted a study of landfill capacity levels and found that under current DEP regulations there are less than six years left until the state will run out of space for solid waste disposal. Most of the remaining capacity is in Western PA, while the eastern and central regions are almost full. Even if the supply of foreign waste remains high, it may become increasingly difficult to find support for further landfill expansion. Political conflict between waste management companies and communities will intensify, especially with those communities that recog-

48 Business and large residential complexes could continue to use large containers such as dumpsters and special fee schedules.

nize that every waste management decision should be made by the people that will have to inevitably deal with it, not by distant companies whose biggest interest may be maximizing profits off of someone else's long-term problem.

These communities have a right to be concerned, as nothing about waste management is currently sustainable. Even when trash is properly discarded, collected, transported, and disposed of, significant problems remain for the current and future members of the affected community. Instead of permanently dealing with trash, landfills simply delay addressing the problem. Countless studies have proven that not only are landfills ineffective long-term strategies for trash disposal, but they inevitably harm the community through toxic leachate and methane gas emissions.[49] Trash buried in landfills also wastes land that could be either preserved in its natural state or put to more productive use.

Incinerators, the other "solution" to trash disposal, are no better. Instead of simply burying solid waste out of sight, incinerators burn all this material together, not only polluting the air but dissipating toxic substances such as mercury and lead into the surrounding atmosphere, where it is eventually absorbed back into our bodies through the air we breathe, the water we drink, and the food we consume. Even incinerators require landfills to store the leftover ash, which can eventually leak out and contaminate the environment with residual amounts of toxic and chemically-altered materials as well.

To tackle the serious problem of waste disposal, instead of simply "managing" waste we need to develop way to actively reduce the amount of waste to be disposed. Many environmentalists and entrepreneurs are beginning to recognize that current waste disposal methods are burning and burying large amounts of value along with the trash. **Because of this, city should strengthen its waste reduction efforts by expanding the municipal recycling and organic waste composting programs.** By offering free recycling and composting to offset the unit cost of trash, people will have more incentive to recycle and compost as much as possible, cutting trash generation amounts and recapturing valuable materials for further economic development.

As the Institute for Local Self-reliance's "Recycling Means Business" project explains, recycling is both an excellent economic development and environmental protection tool. Although the PWIA claims to be an invaluable asset to Pennsylvania's economy, studies are increasingly discovering that on a per-ton basis, sorting and processing recyclables alone sustains ten times more jobs than landfilling or incinerating. Recycling is also another excellent example of the power of the economic multiplier: not only are jobs involving recycling and material reuse more rewarding that those offered by typical waste management services, the jobs related to reuse operations, recycled material refabrication, and resulting new product manufacturing are more labor intensive, creating more jobs with better wages. With effective implementation and strong public participation, "waste to wealth" initiatives such as recycling and composting can continue to help make significant decreases in the amount of waste contributing to local landfills and incinerators (potentially recapturing over half of the waste created), transform more materials

49 Besides independent studies, the EPA has stated multiple times in the Federal Register that all landfills—even so-called "state-of-the-art" ones—end up leaking, and the resulting leachate mixture that pollutes that soil and groundwater is often toxic as hazardous waste. Additionally, the necessary gas emissions from landfills are significant contributors to the threat of global climate change, as well as a source for respiratory disorders.

back into useful forms, and get the community thinking and acting towards more sustainable waste management systems that handle the waste it produces locally.

Since 1990 Reading has been participating in a state-mandated recycling program, which is credited for helping Pennsylvania prevent close to 35% of its solid municipal waste from ending up in landfills and incinerators. Although the program has successfully developed over the past 15 years and continues to offer collection of a wide range of recyclable materials, further progress can only be made if profitable new markets for recyclables can be found. Why not work to develop the local recycling industry? There are plenty of empty industrial sites within the city that could serve as a material recycling facility (MRF), which could receive, sort, and process the items into new raw materials for local manufacturing inputs. The facility should work to accept as wide a range of materials as possible, including glass, plastics, metals, papers, wood, fabric, oils, building materials, and complicated items such as electronics, appliances, and furniture, as then there will be less need to throw almost anything "away."

Such an initiative could become an excellent public/private partnership. The city, through the municipal collection service, could help make recycling as convenient and cost effective as possible, maximizing the amount of material recovered. Once collected, these materials would then be transferred to a cluster of recycling-related local businesses, which would handle the various conversion processes necessary to transform the recyclables into new raw materials or even finished goods, including glass, plastic, and metal manufacturing inputs; cloth fiber; building materials, biomass fuel, furniture, or even works of art. To help these industries get started, the city and CDFI could offer attractive tax and financing incentives to participating businesses, perhaps including waste collection credits for items purchased that contain local recycled materials.

Composting is also a vital component of a waste reduction strategy. Food scraps and food soiled paper products—such as fruits, vegetables, breads, cereals, meat, fish, dairy, coffee grounds and filters, tea bags, paper towels, napkins, plates, and pizza boxes—combine to create the single largest item in our waste stream, often accounting for 35-50% of total waste. Instead of bulking up landfills or being burned in incinerators, these materials can be naturally transformed into a nutrient-rich soil for use in our gardens, landscapes, parks, and farms.

To introduce municipal composting, the city should simply build upon its existing leaf composting and tree mulching program. In addition to recycling bins, composting bins or food material receptacles would be distributed to each property, and people could choose to either compost on their own property or have this material collected and composted elsewhere. Composting sites would be designated around the city, perhaps with at least one in every collection zone, where residents and local businesses could either dump off food and yard waste or pick up free mulch and compost.

An excellent implementation of these programs has been developed by Alameda County in California. Recognizing the need to address the problems mentioned above, the county has developed a comprehensive waste management program designed to divert over 75% of waste from the waste stream by 2010 and provides an impressive amount of both educational resources and quality services to their citizens. Besides addressing the waste management needs of residents, businesses, schools, and government, the program works on economic development partnerships with area businesses and is also involved in green building initiatives, including construction and demolition debris recovery and green building promotion. Their integrated approach to waste management could serve as a terrific model for both the city and the rest of the county, who will need to work together closely to tackle this complicated challenge.

Above all, in order to be successful we need to shift away from the idea of waste management towards one of "resource management," where instead of seeking to simply reduce the amount of waste created, we must work to eliminate the idea of waste altogether. This new approach, called "Zero Waste," challenges the fundamental way we think about waste by pointing out that in the natural world, nothing is ever wasted. A tree, for example, draws upon many of the resources in its environment, but every function contributes back to the surroundings. After drawing up nutrients to produce leaves and carry out photosynthesis, these leaves eventually return to the soil as part of the incredibly rich material humus, providing a wide spectrum of minerals and nutrients to further enrich the natural systems the tree depends on. This process is often known as "eco-cycling."

Recycling and composting are crude examples of this natural process. As explained by William McDonough and Michael Braungart, authors of *Cradle to Cradle: Remaking the Way We Make Things*, all waste should be broken down into either technical nutrients (such as polymers, metals, chemicals, and synthetic materials) for further industrial use or biological nutrients (such as food waste, bioplastics, paper, and natural fibers) that can safely and quickly return to the ecosystem. According to the authors however, our current attempts to address waste by recycling and composting are dealing with the problem on the wrong end. To effectively end waste, the materials, processes, and designs used to produce modern goods and services must undergo an evolution—essentially through a second industrial revolution. Most materials used today aren't designed to be broken down into pure technical and biological nutrients, and many are actually "downcycled" into reduced forms (which often cannot be subsequently recycled). In addition, many of the materials in use contain toxic substances that need to be taken out of the nutrient cycle altogether.

Such challenges will require innovative new thinking by chemists, biologists, ecologists, engineers, architects, and other natural and industrial thinkers, and opens up a whole universe of new opportunities for the city. Strengthening our educational institutions will be critical to develop the next generation of innovators, and a full commitment to the principles of the Natural Step can best guide our thinking and actions. On the business side, sustainability will become one of the biggest competitive advantages of the 21st century, and local companies can begin positioning themselves by recognizing the growing importance of the "triple bottom line:" profits, people, and planet. To lead this effort, companied in the region seeking or awarded ISO 14001 certification should adopt the Natural Step to advance their environmental stewardship.

Government also has a crucial role in this process. Although some companies are voluntarily adopting sustainable business practices, policy must push the need for sustainability square into the market, which can be done most effectively not through regulation but through taxation. By fairly applying the concepts of land value taxation and green taxes, as well as cutting subsides that distort production and consumption in favor of unsustainable methods, the second industrial revolution should be able to take off and spread even faster than the first.

Inspiration and Perspiration

"The good we secure for ourselves is precarious and uncertain until it is secured for all of us and incorporated into our common life."

–Jane Addams

"The American city should be a collection of communities where every member has a right to belong. It should be a place where every man feels safe on his streets and in the house of his friends. It should be a place where each individual's dignity and self-respect is strengthened by the respect and affection of his neighbors. It should be a place where each of us can find the satisfaction and warmth which comes from being a member of the community of man. This is what man sought at the dawn of civilization. It is what we seek today."

–Lyndon B. Johnson

"Now is the accepted time, not tomorrow, not some more convenient season. It is today that our best work can be done and not some future day or future year. It is today that we fit ourselves for the greater usefulness of tomorrow. Today is the seed time, now are the hours of work, and tomorrow comes the harvest and the playtime."

–W.E.B. DuBois

The Roxbury section of Boston, MA is a depressed industrial area near the harbor, and for quite some time served as a dumping ground for the area's solid waste. Primarily a minority community, it lacked the political and economic knowledge and power to address its severe levels of crime, blight, pollution, poverty, and other problems present in urban slums. Faced with the prospect of an external redevelopment plan that could break up the neighborhood, some members of the community decided to fight to preserve their community and for the ability to develop their own revitalization plan. Although the city was initially resistant to the idea, the community proved they were serious and in 1984, the Dudley Street Neighborhood Initiative (DSNI) was born.

A little over a year ago the DSNI celebrated their 20th anniversary, and has an impressive amount of successes to be proud of. With strong leadership, wide participation, hard work, diverse ideas, and an incredible visioning process, the neighborhood was able to eliminate illegal dumping and hazardous waste, acquire and develop large sections of vacant land, offer quality and affordable housing, establish a town center, rehabilitate historic character, fight investment red-lining, increase transportation access, develop day-care networks, restore a local park, foster local enterprise, establish a neighborhood scholarship, design and build several community centers, improve the local schools, and dramatically increase property values. These efforts are certainly helping the community to reach the goals of democratic governance, economic self-reliance, and environmental sustainability.

The DSNI story should become an important source of inspiration for our community, where cynicism and inaction have become deeply ingrained. Most people living in or outside of Reading have little faith in the city recovering and see little reason to have an interest in the prospect of positive change. David Rusk, who has done urban studies in the region, has placed Reading among the cities "beyond the point of return." At a stage where many people have given up on Reading, it is more urgent then ever for us as citizens to take control of the challenges that surround us.

To be successful, it will take the tried and true combination of inspiration and perspiration, and the empowerment and involvement of all our citizens. Towards that effort, this paper is a starting point—a vision and framework for change. Its goal is not to point out past mistakes but to learn from them, not to criticize existing efforts but to make them stronger. If the concepts in this paper are seriously applied, our city has the potential to soon become the best community to live, work, and visit in the state and can become, like Dudley street, an inspirational model for others to follow in the pursuit of quality of life for all.

Imagine Reading as a successful city with clean, safe, and vibrant neighborhoods to live in; a democratic, responsive, and accountable government to participate in; a diverse, productive, and resilient local economy to serve your daily needs; a resourceful, creative, and engaging educational system for both you and your children; a flexible, affordable, and comprehensive transportation network to move about in; and a restored, healthy, and abundant environment that can meet your energy, water, food, and other basic needs sustainably both now and for future generations. If this is a vision that you can believe in, the good news is that it can happen. Now is the time to bring this vision out of our imagination and to life, and this framework is a way to make it happen. The future of Reading starts here, and with your help can begin now.

Appendix A: Community Indicators and Assets

Although a Community Bill of Rights and Responsibilities is a great start, it doesn't give us a detailed picture of the exact kind of changes we want and need to make to our community to keep it healthy and sustainable. How will we know what changes need to be made, and that our efforts at change are successful? We not only need a specific set of goals, but also an effective way of monitoring our progress. The better we can monitor change, the better we can manage it. This will help us chart out the directions on our roadmap and tell us exactly where we are along the journey.

One type of tool that can help in this process is called a community indicator. Indicators are technical measures of change, such as the number of jobs created annually, the rate of violent crime, or even the city's current population of homeowners. For our needs however, many of these common types of indicators won't be effective enough. Such indicators are generally one-dimensional, measuring changes as if these issues were somehow independent from one another. Would it really be possible to increase home ownership without reducing crime or increasing job opportunities?

Sustainable community indicators seek to address this dilemma by recognizing important interactions between different social, economic, and environmental conditions in the community, linking these conditions together, and monitoring changes between them. Because of this, they are considered multidimensional indicators and take multiples causes and effects into consideration. Sustainable indicators educate us about the complex web of interrelated conditions that exist in the community, and encourage us to think harder about what changes really are most important and what methods are most effective to produce those changes. They also can identify positive improvements in one area that could be causing undesired negative shifts in other areas of change, causing us to go one step forward but two steps back.

As an example, let's take a look at perhaps the most popular indicator in the nation: the Gross National Product (GDP). The GDP measures the amount money being spent in the country, and is widely accepted as the official indicator of the country's overall economic health. While it is good to have some sort of measure of national economic development, the problem with the GDP is that it measures all activity as economic improvements, whether or not the spending is actually related to harmful activity. In this respect, things such as car accidents, the building of prisons, and the exhaustion of natural resources for the production of goods are all considered parts of successful "economic growth." As a purely statistical economic indicator, the GDP is perfectly suitable as a measure of sum of all goods and services produced in a country over time. What it's not however, is an accurate measure of overall social, economic, and environmental health of the nation, which it is often viewed as being.

To address this problem, the organization Redefining Progress developed an alternative measure called the Genuine Progress Indicator (GPI). While it starts out with the same production and consumption data that the GDP is based on, the GPI adds, subtracts, and adjusts important factors such as crime and family breakdown, household and volunteer work, income distribution, resource depletion, pollution levels, environmental damage, changes in leisure time, defense expenditures, the lifetime of durable goods and public infrastructure, and the dependence on foreign assets (which includes the billions of dollars held by other countries to finance our ever expanding federal deficit). When taken to account, these factors help produce a more accurate state of the nation's health and indicate areas in need of proper policy changes—practically leveling off the rise on charts that the GDP suggests.

While the GPI is national in scope, similar measures of progress are necessary within our own community. Some are quite simple while others are similar to the GDP and GPI in that they index several other indicators. Indicators are considered more effective if they include links between multiple social, economic, and environmental conditions. Some common community sustainability indicators include:

- Dollars spent in locally-owned businesses
- Number of building permits issued for sustainable development
- Children living in poverty
- Number of open spaces in each neighborhood
- Percent of buildings in need of major repair
- Energy consumption from nonrenewable sources
- Number of people using public transportation on a regular basis

Because of their value, we need to employ sustainable community indicators to make sure our goals are well-defined, our approaches are effective, and our successes are accurate. By seeing the community as a whole and recognizing the many links between the social, economic, and natural systems we live within, we'll have the complete picture necessary to develop holistic, effective, and long-term changes. By working as a community to identify and assemble the necessary indicators, it will help reinforce both the need for each individual to recognize the connections between their rights and responsibilities and the fact that everyone can have a profound effect on change.

To decide which and how many indicators to create, the community as a whole will have to come together and determine what important changes need to be tracked. Comprehensive indicator systems are available from organizations such as Redefining Progress and Sustainable Measures and can be adapted for our local needs. We can also look to other communities that are employing sustainability indicators, such as Sustainable Seattle (one of the pioneers in sustainability indicators that has been around for almost 15 years), Boulder County Healthy Community Initiative in Colorado (who has an innovative program that gives itself a "quality of life" report card every two years), and Greenville, SC, recently recognized for its interesting parallels to the challenges Reading faces, who also began utilizing a comprehensive indicators program in 1993 (this effort undoubtedly has helped their city begin its successful revitalization plans).

How many indicators should the community have? In general, as many as are needed to help us reach our goals. Many factors will contribute to the number of indicators developed, including the number of important issues that need to be measured and the resources available to monitor and report on the indicators. As a rule of thumb, the final list should be neither so short that critical issues or areas are overlooked nor so long that the monitoring and reporting processes are overwhelming in scope. As an organic, needs-driven process, remember that indicators may need to be added, changed, or removed over time. The important thing is to keep an accurate set of community goals; the number and types of indicators will naturally follow.

Once the indicators are developed, we need to determine exactly how they will be monitored. The data sources used to measure change can come from many different inputs. Some data sources are generated within the local government, while others may be collected from the business community and other organizations. Whatever their source, keep the goals of relevance, understandability, reliability, and timeliness in mind. The more local the data, the better; information from outside the community will be less relevant and produce far too generalized results. The data should also be understandable to the general public—complicated formulas and academic terminology should be avoided; it must be reliable, both in accuracy and long-term availability; and finally, it should be current information.

As with the initial process of developing the indicators, the community should work together closely to monitor them. Some segments of the community will be naturally better suited to track indicators that relate to their activity, especially if they generate or aggregate the original data sources (like business or government). Another important group of participants should include the local academic community: from crime to water quality, there are students in every field of study that could contribute to the process as part of their educational experience.

The frequency of measurement will have to be determined based on the rate of change of each indicator. Some indicators, like those measuring most environmental changes, can be monitored annually. Others, such as economic indicators, may need to be monitored on a constant basis to keep pace with fluctuations in the economy. Because of this, the ability to measure changes in an indicator should be an important consideration at creation time.

In order to be truly useful, there must be practical applications of these indicators once they're in place and are being monitored. The biggest objective should be to ensure this information gets presented to the public on a regular basis, as this will help the community know if its daily efforts at change are successful. Even for long-term goals, small steps of progress will keep the human spirit burning strong.

The media can play an important role in highlighting the changes made. The mayor can include the results as part of the "State of the City" report, and city council can use the data to make informed policy. The educational community, including both colleges and K-12, can respond to the changes with additional analysis. The community as a whole can get together to continue dialog on the current status, and when important milestones are reached, celebrate these achievements. Successful indicator improvements can also help market the city to potential residents, businesses, and visitors, highlighting positive changes. The possibilities are limited only to the community's creativity and desire to make the indicators an effective tool.

Besides sustainability indicators, there is another resource available to help make our efforts successful. Would a carpenter want to begin building a home without knowing what equipment and materials are available to her or him? Of course not. Therefore, how are we to rebuild our whole community without identifying and inventorying what tools and resources we have to utilize? Additionally, because our focus should remain on local self-reliance and sustainability, we'll need to take a close look within, not outside, our community for these important items. So where do we look, and what should we look for? The answer, quite simply, is all around us.

From the Oakbrook public housing and the shores of the Schuylkill river to the estates above Hampden Boulevard and the forests of Mt. Penn, we are surrounded by treasure. Besides the blessings of every natural resource necessary to develop and sustain life, each individual, association, and institution in our community contains knowledge, ideas, energy, skills, and experience, and this collective wealth can be thought of as our community assets. **By shedding the view of Reading as a city of deficits and needs, and instead collecting, connecting, and mobilizing our community assets, we can recognize the rich heritage of our past, the existing potential of the present, and the great promise of the future.**

Let's take a closer look at what exactly assets are, and how we can recognize them. As mentioned above, assets exist on every level of our community. The recommended framework to carry out the asset mapping and mobilization process comes from the Asset-Based Community Development Institute, which provides manuals, examples, and other useful materials. Those who participated in the Berks Coalition for a Healthy Community in the mid-90s will remember this approach.

Every person is an asset, in that they possess a number of qualities to contribute to the development of the community. Whether they have more or less than others matters not; those unemployed, disabled, uneducated, old, or young are just as vital as others in making this a great city again. Oftentimes the largest amount of hidden assets exist within these individuals. Additionally, there isn't a limit to the type of contributions necessary to build community; in addition to those able to rebuild our political, economic, and environmental systems, we also need to know who can make our neighborhoods beautiful, our culture diverse, and our arts exciting.

Individuals then join together to form associations and organizations, within which the effectiveness of their capacities are increased by working together. This could be a crime watch, dance group, or business club. Regardless of the size and scope of these groups, each has unique and vital capacities to contribute on the many levels of community change, from the block, to the neighborhood, to the entire city. One is usually surprised to discover the number and variety of groups that exist in a community, even in some of its poorest areas.

On a bigger scale, there also exist the many institutions in our city. This includes the government, schools, libraries, and other large organizations. Obviously they each serve innumerable functions to the citizens, each of which can be considered an asset, such as providing meeting spaces for other groups, performing theatrical productions, and enforcing the rule of law. While many of these institutions influence our daily lives, we still tend to not think of the many ways they could be used as important agents of community change.

Beyond institutions are the natural and societal systems operating in and around our community such as the economy and the environment, both of which we examined in detail in the previous sections. These systems, which affect our lives more than anything else, also hold an untold number of important assets, many of which aren't utilized nearly enough, such as untapped market demands or natural resources.

So what kinds of specifics should we take notice of? In general, anything and everything that holds potential value for the purpose of rebuilding our community from the inside out. Consider the genuine value in each of the following: the energy and freshness of the youth, the wisdom and experience of the seniors, the potential and desires of the unemployed, the creativity and talent of the artists, the vision and determination of the leaders, the location and utility of the properties, the culture and diversity of the neighborhoods, the products and services of the businesses, and the knowledge and resources of the institutions. It's hard to image what couldn't be done were all these assets effectively utilized. By understanding the breadth and depth of our city's assets, we'll be better prepared to find real solutions to the challenges we face. Additionally, the process itself of asset mapping can be an empowering and reaffirming experience for the whole community in such an awful time of cynicism and helplessness.

To begin discovering these assets we simply have to go out and look. Through surveys done at community events, over the phone or through the Web, data about the individuals, associations, and institutions can be collected. By walking around the community, we should also inventory wasted resources, such as empty buildings and vacant lots. Nothing should be overlooked, as everything has potential value.

Once this information is collected, the next step is to begin connecting assets to each other, in order to mobilize them. By connecting compatible assets, new assets and opportunities are created. For example, an individual that has a great idea for a business but believes it could never happen can be connected to organizations that provide training and funding opportunities to entrepreneurs. Also, many associations and institutions are suffering from lack of participation; this can be addressed by mapping people interested in the same activities and issues these groups are associated with. Oftentimes the biggest problem in a community is that people and organizations don't know the other exists. By mapping and mobilizing assets, knowledge truly becomes power.

One may notice many similarities between assets and indicators. In fact, the processes of identifying, collecting, reporting, and maintaining these two types of information are so similar that they should be part of the same effort and involve the same wide range of participants mentioned in the indicators section above. **To implement these systems, one option could be the use of a Wiki, which is a Web-based information system that can be edited by virtually anyone.** The system could also be used to store other information, such as historical records, images, and other community media. An excellent example of this is *Wikipedia*, the online encyclopedia.[50]

These efforts constitute elements of an emerging field called *Community Informatics*, which seeks to link and monitor the health and activity of communities. Reading is an excellent community to experiment on with these tools, and successful implementation could greatly enhance the effects of our other efforts at reform. Such technology is critical to democratic governance, because an effective democracy and the resulting policy requires a well-informed citizenry.

50 For a good idea of how a Wiki works, check out Wikipedia's current entry for Reading located at http://en.wikipedia.org/wiki/Reading,_Pennsylvania. Try contributing more content there, too.

Appendix B: Resources

Democratic Governance

The Rebirth of Urban Democracy
Jeffrey M. Berry, Kent E. Portney, and Ken Thomson, 1993; ISBN: 0-815-70927-7

Community Bill of Rights and Responsibilities

The Spirit of Community
Amitai Etzioni, 1993; ISBN: 0-671-88524-3

The Communitarian Network
http://www.gwu.edu/~ccps/index.html

Writing a Neighborhood Bill of Rights
http://tinyurl.com/d3xpz

Baltimore, MD Community Bill of Rights Law
http://www.baltimoremd.com/community/claw/combillrights.html

Dudley Street Neighborhood Initiative Declaration of Community Rights
http://www.dsni.org/Comunity Information/Dsni_declaration_of_commun_.htm

Political Participation and Representation

Center for Voting and Democracy
http://www.fairvote.org

Fixing Elections
Steven Hill, 2002; ISBN: 0-415-93193-2

New Choices/Real Voices
Douglas Amy, 2002; ISBN: 0-231-12549-6

Proportional Representation
http://www.newrules.org/gov/proport.html

Public Commissions

Reading, PA Public Boards and Commissions
http://www.readingpa.gov/boards_authorities_commissions.asp

Berkeley, CA Public Boards and Commissions
http://www.ci.berkeley.ca.us/commissions/publicworks/default.htm

Neighborhood Councils

Town Meetings
http://www.newrules.org/gov/townmtg.html

Los Angeles, CA Department of Neighborhood Empowerment
http://www.lacityneighborhoods.com/page2.cfm?doc=home

Seattle, WA City Neighborhood Council
http://www.cityofseattle.net/neighborhoodcouncil

Charleston, SC Neighborhood Resources
http://www.ci.charleston.sc.us/dept/content.aspx?nid=666

Reading, PA Neighborhood Associations
http://www.bctv.org/Neighborhoods.aspx

Intergovernmental Cooperation

PA Intergovernmental Cooperation Handbook
http://www.newpa.com/download.aspx?id=45

PA Council of Governments Director's Handbook
http://www.newpa.com/download.aspx?id=36

Lobbying for Real Home Rule

National League of Cities
http://www.nlc.org

PA League of Cities and Municipalities
http://www.plcm.org

PA Citizen's Guide to Local Government
http://www.newpa.com/download.aspx?id=33

PA Citizen's Guide to City Government
http://www.newpa.com/download.aspx?id=34

Sister Cities International
http://www.sister-cities.org

PA Home Rule Law
http://www.newpa.com/download.aspx?id=43

Economic Self-reliance

Going Local
Michael Shuman, 1998; ISBN: 0-684-83012-4

Institute for Local Self-reliance
http://www.ilsr.org

Ralph Borsodi School of Living
http://www.s-o-l.org

E. F. Schumacher Society
http://www.schumachersociety.org

Community Information Resource Center
http://circ2.home.mindspring.com

Community Economic Development
http://www.rmi.org/sitepages/pid14.php

The Great American Jobs Scam: Corporate Tax Dodging and the Myth of Job Creation
Greg LeRoy, 2005; ISBN: 1-57675-315-8

Local Taxes

Progress and Poverty
Henry George, 1998; ISBN: 0-91131-210-2

Georgist Economics
http://www.henrygeorge.org

Center for the Study of Economics
http://www.urbantools.org

Land Value Tax
http://www.newrules.org/environment/landtax.html

Giving Life to the Property Tax Shift
http://www.progress.org/geonomy/rppaper.html

Earth Rights Institute Green Tax Primer
http://www.earthrights.net/vision.html#primer

Green Tax Shift Headquarters
http://www.progress.org/banneker/shift.html

Tax Waste, Not Work
http://www.redefiningprogress.org/newpubs/1997/TaxWaste_sum.pdf

Local Businesses

The Hometown Advantage
http://www.newrules.org/retail

Business Alliance for Local Living Economies
http://www.livingeconomies.org

American Independent Business Alliance
http://www.amiba.net

Innovations in Ownership
http://www.ncesa.org/html/thirdway.html

Berks Economic Partnership
http://www.gobep.org

Initiative for a Competitive Greater Reading
http://www.greaterreading.com

Reading-Berks Chamber of Commerce/SCORE
http://www.berkschamber.org

Local Production

Import Substitution Introduction
http://www.planning.unc.edu/courses/261/drucker

Import Substitution as Sustainable Economic Development
http://www.umich.edu/~econdev/importsub

A Thesis on the Rationales of Import Substitution Industrialization Strategy
Hong Liang, 1997; ISBN: 1-58112-007-9

John Sewell on Import Substitution
http://www.treehugger.com/files/2005/06/john_sewell_on_1.php

The Economy of Cities
Jane Jacobs, 1970; ISBN: 0-394-70584-X

Local Purchasing

Civic Economics
http://www.civiceconomics.com/html/retail.html

Andersonville Study of Retail Economics
http://www.andersonvillestudy.com/html/study.html

Local Purchasing Preferences
http://www.newrules.org/retail/purchasing.html

Buy Local First Utah
http://www.localfirst.org

Think Local Portland
http://www.thinklocalportland.org

Buy Local Philly
http://sbnphiladelphia.org/buylocalphilly

Reinventing Money
http://www.reinventingmoney.com

Local Currencies
http://www.smallisbeautiful.org/local_currencies.html

Money: Understanding and Creating Alternatives to Legal Tender
Thomas H. Greco, Jr., 2001; ISBN: 1-89013-237-3

Ithaca HOURS
http://www.ithacahours.com

Complementary Currency Resource Center
http://www.complementarycurrency.org

How Currency Systems Work
http://www.transaction.net/money

Local Labor

Universal Living Wage Campaign
http://www.universallivingwage.com

Living Wage Resources
http://www.newrules.org/equity/wage.html

Citizens' Dividend
http://www.progress.org/dividend

Ithaca Health Alliance
http://www.ithacahealth.org

Health Democracy
http://www.healthdemocracy.org

Muskegon Community Health Alliance
http://www.mchp.org

Out of the Box and Over Barriers
http://www.authorhouse.com/BookStore/ItemDetail~bookid~12561.aspx

Single-payer Universal Health Care
http://www.newrules.org/equity/statesinglepayer.html

Schools and Property Taxes
http://www.urbantools.org/policy-papers/tax-reform/ploneexfile.2006-01-10.8304202263

Educational Equity
http://www.newrules.org/equity/eduequity.html

PA Department of Eduction Charter School Resources
http://www.pde.state.pa.us/charter_schools/site/default.asp

PA Charter School Resource Center
http://www.pacharterschools.org/main.html

Strengthening Pennsylvania's Charter School Reform
http://www.wmich.edu/evalctr/charter/pa_5year

Local Reinvestment

Coalition of Community Development Financial Institutions
http://www.cdfi.org

National Community Capital Association
http://www.communitycapital.org

ShoreBank
http://www.sbk.com

National Federation of Community Development Credit Unions
http://www.natfed.org

Self-help Credit Union
http://www.selfhelp.org

National Community Reinvestment Coalition
http://www.ncrc.org

Solari
http://www.solari.com

Environmental Sustainability

Redefining Progress's Sustainable Economics Program
http://www.redefiningprogress.org/newprograms/sustEcon

Green Cities Declaration and Urban Environmental Accords
http://www.wed2005.org/0.0.php

Local Governments for Sustainability
http://www.iclei.org

Toward Sustainable Communities: Resources for Citizens and Their Governments
Mark Roseland, 1998; ISBN: 0-86571-374-X

The Key to Sustainable Cities: Meeting Human Needs, Transforming Community Systems
Gwendolyn Hallsmith, 1998; ISBN: 0-86571-499-1

The Post Carbon Institute's Relocalization Network
http://www.postcarbon.org/relocalize

The Natural Step Framework
http://www.naturalstep.org

The Natural Step for Communities
Sarah James and Torbjörn Lahti, 2004; ISBN: 0-86571-491-6

The Natural Step for Business
Brian Nattrass and Mary Altomare, 1999; ISBN: 0-86571-384-7

Energy Supply

The End of Oil : On the Edge of a Perilous New World
Paul Roberts, 2004; ISBN: 0-61823-977-4

Peak Oil
http://www.peakoil.org

Climate Change
http://www.rmi.org/sitepages/pid16.php

Energy Conservation
http://en.wikipedia.org/wiki/Energy_Conservation

Energy Efficiency and Renewable Energy Clean Cities Program
http://www.eere.energy.gov/cleancities

Energy Hog
http://www.energyhog.org

National Association of Energy Service Companies
http://www.naesco.org

The Energy Savings and Environmental Emission Reduction Benefits Delivered by the Energy Service Company Industry
http://www.cleanerandgreener.org/download/escosr1.pdf

Renewable Energy
http://en.wikipedia.org/wiki/Renewable_energy

Renewable Energy News
http://www.renewableenergy.com

National Biodiesel Board
http://www.biodiesel.org

Biodiesel America
http://www.biodieselamerica.org

AmeriGREEN Fuels
http://www.amerigreenbio.com

Moyer Plumbing and Heating
http://www.moyerplumbingandheating.com

Bernville Quality Fuels
http://www.bernvillequalityfuels.com

Rocky Mountain Institute Energy Team
http://www.rmi.org/sitepages/pid17.php

Democratic Energy
http://www.newrules.org/de

Small is Profitable
http://www.smallisprofitable.org

Chicago Climate Exchange
http://www.chicagoclimatex.com

Climate Neutral Bonding Policy
http://www.newrules.org/de/climateneutral.html

Water Supply

Water Management
http://www.rmi.org/sitepages/pid15.php

American Water Works Association
http://www.awwa.org

Greywater Irrigation
http://www.greywater.com

Grey Water Central
http://www.oasisdesign.net/greywater

Humanure
http://www.jenkinspublishing.com/humanure.html

Composting Toilets
http://www.compostingtoilet.org

Natural Treatment for Sewage Treatment Facility
http://www.landandwater.com/features/vol49no2/vol49no2_2.html

Living Water Design Company
http://www.livingwater.org.uk/home.asp

The Emergence of Treatment Wetlands
http://pubs.acs.org/hotartcl/est/98/may/emer.html

Rainwater Catchment Systems for Domestic Supply: Design, Construction and Implementation
John Gould, 1999; ISBN: 1-85339-456-4

Rainwater Harvesting
http://www.oasisdesign.net/water/rainharvesting

Wonderwater Rain Catchment Systems
http://www.wonderwater.net

Food Supply

Reading Eagle Special Report: Down on the Farms
http://www.readingeagle.com/WebExclusives/farmseries

Sustainable Table
http://www.sustainabletable.org

Local Harvest
http://www.localharvest.org

Buy Fresh, Buy Local PA
http://www.buylocalpa.org

The Food Trust
http://www.thefoodtrust.org/

Agricultural Cooperatives
http://www.newrules.org/agri/farmown.html

Rodale Institute's New Farm
http://www.newfarm.com

Nurturing Our Rural Communities
http://www.newrules.org/agri

National Family Farm Association
http://www.nffc.net

Land Management

(For general land value tax information, see "Local Taxes")

Estimating Land Values
http://landpolicy.r-hosts.com/entry.php?eid=4

Mayor's Final Report on Housing
http://www.readingpa.gov/mayor_report_housing_report.asp

Fels Institute Vacancy Inventory and Reinvestment Strategies for Reading, PA
http://www.readingpa.gov/documents/fels_report.pdf

Community Land Trust
http://www.s-o-l.org/landtrust.htm

Institute for Community Economics
http://www.iceclt.org

Neighborhood Design Initiative
http://www.readingpa.gov/cd_ndi.asp

National Trust for Historic Preservation
http://www.nationaltrust.org

Preservation Pennsylvania
http://www.preservationpa.org

U.S. Green Building Council
http://www.usgbc.org

Green Building Association of Central Pennsylvania
http://www.gbacpa.org

Congress for the New Urbanism
http://www.cnu.org

Association of the New Urbanism in Pennsylvania
http://www.anupa.org

The Coming Demand
http://www.cnu.org/cnu_reports/Coming_Demand.pdf

Form-base Codes Institute
http://www.formbasedcodes.org

SmartCode
http://www.placemakers.com

Transportation Management

Congestion Charges
http://en.wikipedia.org/wiki/Congestion_charge

London Congestion Charge System
http://www.cclondon.com

The High Cost of Free Parking
Donald Shoup, 2005; ISBN: 1-88482-998-8

TerraPass
http://www.terrapass.com

Carbon Fund
http://www.carbonfund.org

American Public Transportation Association
http://www.apta.com

Pennsylvania Transit Coalition
http://www.patransit.org

A New Approach to Transport Funding
http://www.labourland.org/in_the_news/articles/new_approach.php

Taken for a Ride
Don Riley, 2002; ISBN: 1-90120-202-X

Wheels of Fortune: Self-funding Infrastructure and the Free Market Case for a Land Tax
Fred Harrison, 2006; ISBN: 0-255-36589-6
http://www.iea.org.uk/files/upld-publication307pdf

Car Sharing
http://www.carsharing.net

ZipCar
http://www.zipcar.com

Surface Transportation Policy Project
http://www.transact.org

Dan Sturges, Transportation System Designer
http://www.carboymobility.com

Car-free Cities
http://www.carfree.com

Waste Management

Recycling and Waste Reduction Rules
http://www.newrules.org/environment/recycle.html

Waste to Wealth
http://www.ilsr.org/recycling

PA Landfill Capacity Issues
http://www.pawasteindustries.org/industry_issues_capacity.asp

Grassroots Recycling Network Zero Waste Campaign
http://www.grrn.org

Professional Recyclers of Pennsylvania
http://www.proprecycles.org

Alameda County Waste Management Authority
http://www.stopwaste.org

Cradle to Cradle: Remaking the Way We Make Things
William McDonough and Michael Braungart, 2002; ISBN: 0-86547-587-3

Inspiration and Perspiration

Dudley Street Neighborhood Initiative
http://www.dsni.org

Streets of Hope : The Fall and Rise of an Urban Neighborhood
Peter Medoff and Holly Sklar, 1994; ISBN: 0-89608-482-5

Community Indicators and Assets

Community Indicators

Sustainable Community Indicators
http://www.sustainablemeasures.com

Redefining Progress
http://www.rprogress.org/newprograms/sustIndi

Sustainable Cincinnati
http://www.sustainablecincinnati.org/pages/indicators.html

Sustainable Seattle
http://www.sustainableseattle.org/Programs/RegionalIndicators

Community Assets

Building Communities from the Inside Out
John P. Kretzmann and John L. McKnight, 1993; ISBN: 0-87946-108-X

Asset Based Community Development Institute
http://www.northwestern.edu/ipr/abcd.html

Connecticut Assets Network
http://www.ctassets.org

Index of Recommendations